Communication practices of farmers in the Namo District, Laos: Obstacles and opportunities for communication of technical information

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Abstract
This master’s thesis is a Minor Field Study in Technical Communication, granted by the Swedish International Development Cooperation Agency (Sida) and carried out at the department of Building Economics and Management at Chalmers University of Technology, Göteborg, Sweden. The study is conducted under the supervision of the Lao-Swedish Upland Agriculture and Forestry Research Programme (LSUAFRP), which is a partnership between the National Agriculture and Forestry Research Institute (NAFRI) in Laos and Sida.

The purpose of the study is to investigate how farmers in the Namo District, Laos, obtain, communicate and relate to new agriculture and forestry information and also to examine some aspects of how traders obtain and communicate this information. Based on the results, conclusions are drawn and recommendations are given. A further aim of the report is to reflect over the methodology and suggest improvements.

The study is a case study carried out during two months in Laos. The data was mainly collected through observations and qualitative interviews with farmers and traders. The interviews were simultaneously interpreted in one, or when necessary, two steps.

The results indicate that traders, neighbours and family members constitute the farmers’ most frequently used sources of information and that village meetings, trainings and demonstrations, study tours and face-to-face discussions constitute commonly used channels for transfer of information. The farmers are interested in receiving new agriculture and forestry information and they experiment with and compare the information. Looking at the gender aspect of communication, women seem to have less knowledge of the Lao language and less access to information disseminated at village meetings than men. The study also reveals that traders are interested in receiving more technical information. The recommendations include changing the time of the village meeting, increasing the amount of information in local language and developing the information exchange with traders.

The study shows that when an interview requires translation it is important that all interpreters involved are well aware of the purpose of the study and intention of the questions. It is also useful for the researcher to have notions in the language and the culture of the interviewee. The recommendations include doing a pilot study and carrying out preparatory discussions with the interpreter.
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I wished to show my personal and honest interest for his work and everyday life in the village. “Do you always bring along your children when you work in the field?” Of course, lunch constitutes a perfect occasion to talk outside the strict frames of the interview. The answers were short and polite but did not encourage further dialogue. Why does he seem so uninterested in what I say? Why can I not establish a friendly relationship with him? Does he misunderstand my questions? “We do not talk while eating” I was explained after a while.

Oh, I understand. I will try again while waiting for the last person to finish the meal. One minute later the man left the table, washed his hands and went outside. We were still eating. Was he that bothered by my effort to establish a friendly relationship? “One should leave the table right after finished eating” I was once again explained.

“Have you ever listened to a radio?” I asked the woman. She hesitated: “Maybe”. She could not tell me because she does not know what a radio is.

“It should be cut like this and then put like this.” The man describes with gestures what the trader had told him “It can be found in the forest around here and it generates good income.” I assumed - I was quite sure - that is the reason for why the man is devoted to this activity. “No, I do not harvest it at all. I have too much to do in the field”, he answered me
1 Introduction

1.1 Background

Communication
We come from different worlds. We speak different languages, practice different cultures and have different knowledge, experience and values. Therefore we also think, learn and act in different ways. The more distant I am to the other persons world and the less I know about his or her prerequisites, habits and opinions, the higher the risk is that the person I talk to will not understand and interpret what I say in the way I intended it.

How can I obtain another person’s attention and create an interest for listening? How can I make him/her understand how what I mean? How can I facilitate for him/her to act according to the instruction, not only listen? What is the most important information for him/her?

These are questions that each person providing another person with information should consider in order to achieve a successful communication. Successful communication is extremely relevant in the area of rural development.

How is communication related to rural development?
In most development countries, a majority of the population depends directly or indirectly of agriculture for their livelihood. The increasing population and limited land area for cultivation require a change in order to maintain a sufficient food production and income generation, i.e. sustainable livelihood and environment. In order to improve livelihood, the productivity of the farmers needs to be increased and the land cultivated in a sustainable way. This demands the development of new technologies. However, in order to result in an improvement of productivity and land use, these technologies must also be diffused to, accepted and applied by the farmers (FAO and World Bank, 2002).

Ideally, all farmers should be provided with the capacity, i.e. knowledge, skills, attitudes, information, technologies and motivation, to assure productivity, profit and sustainability. Conduct research and extension based on farmer’s needs, effectively transfer the know-how and technologies developed by researchers to the farmers and encourage collaboration between educators, researchers, extension workers and farmers constitute steps in this direction. This demands effective information sharing between actors involved in rural development (FAO and World Bank, 2002).

An Agricultural Knowledge and Information System for Rural Development (AKIS/RD) would link farmers, agricultural educators, researchers and extension workers – the actors involved in rural development. The system facilitates agriculture-related technology, knowledge and information being learned, generated and utilized by all involved actors. Education, research and extension are seen as services designed to respond to the farmers’ need for knowledge in order to improve their livelihood and manage the natural
resources in a sustainable way. The system emphasise that farmers are partners within the knowledge system, not simply recipients (FAO and World Bank, 2002).

By mapping the AKIS/RD in a country, its strengths and weaknesses can be determined. This produces an opportunity to reinforce its strengths and diminish its weaknesses and thereby make the agricultural-related technology, knowledge and information sharing more effective. For this kind of mapping both technical and social features need to be studied and understood.

**Why map the AKIS/RD in Laos on a district level?**
Laos is one of the least populated countries in Asia and is rich in natural resources. However, trends such as increased population pressure on land resources, declining yields and deforestation demand sustainable farming methods for the conservation of natural resources and improvement of the livelihood of the population. The national policy is to stabilize shifting cultivation and stop opium cropping practiced mainly in the uplands. This demands the introduction of alternative crops, cropping systems and cultivation practices to the farmers (NAFRI, 2002).

In order for these alternatives to be successfully adopted by the upland farmers, it is important that new technologies not only fulfil the objectives of the government policy, but that the technologies also correspond to the needs of the farmers as well as to the conditions of the area in question. Therefore, before and during the development of new technologies, the interests and knowledge of all key actors preferably are to be taken into consideration. The technologies finally have to be effectively introduced to the farmers. This implies that a well functioning system of knowledge and information sharing between actors involved in rural development in Laos is important for successful results (NAFRI, 2002). Ignoring the social context when developing know-how and new technologies might, due to for example ineffective transfer of information, imply that these are not taken up by farmers.

It has already been found that coordination between different departments at the district level and capacity to disseminate alternative livelihood systems constitute possible areas of improvements related to rural development in the uplands of Laos (NAFRI, 2002).

Mapping the AKIS/RD in Laos creates an opportunity to improve the previously mentioned aspects of rural development. Studying how farmers and other actors communicate agriculture-related information on a district level constitutes a step towards mapping and improving the AKIS/RD on a national level.

**Why is this study relevant for the different actors involved in rural development in Laos and the Technical University of Chalmers?**
LSUAFRP is a partnership between the National Agriculture and Forestry Research Institute (NAFRI) in Laos and Sida. Its overall development goal is to “improve upland farmers’ livelihoods for poverty alleviation and sustainable use of natural resources” and its objectives include developing “productive upland technologies and land management recommendations that are acceptable to farmers” (NAFRI, 2001).
Activities organised by the LSUAFRP are, to a large extent, implemented by the District Agriculture and Forestry Office (DAFO) and planned by the Provincial Agriculture and Forestry Office (PAFO). According to employees at DAFO in Namo and Ponxay, they provide the farmers with technical information, i.e. new and improved techniques for cultivation, as well as information concerning land use and government policies. Sometimes also information related to the market for a certain product is given.

By carrying out on-farm trials and farmer group activities supported by LSUAFRP, DAFO provides the farmer with a large amount of formal information concerning new products and techniques. The program has adopted the farming systems research and extension approach (FSR/E), which implies that the development of technologies and methods are based on farmers’ preferences and existing knowledge (NAFRI, 2001). An employee at the LSUAFRP explains that a village meeting is held to inform the villagers of the reason for and purpose of the activities. Topics for the activities are determined by problem analysis together with the farmers. Media used to diffuse information to the farmers are for example training and demonstrations, study tours and farmer field days.

Also non governmental organisations provide the farmers with agriculture and forestry information. An employee at German Agro Action (GAA) works for conservation of a watershed in Namo district. GAA recently carried out small scale agriculture projects in two of the LSUAFRP target villages. According to persons working on district level, the district staff of GAA and DAFO cooperates by visiting each other’s experiment. DAFO also provides GAA with technical support.

For researchers at DAFO, PAFO and NAFRI the results of the study constitute an important opportunity to ensure that all categories of farmers are given the possibility to provide researchers with their opinions about suitable research subjects and their specific knowledge.

Understanding how farmers understand and share knowledge and information also provides valuable knowledge of how extension workers – the link between researchers and farmers - can diffuse information to farmers in an effective way. Since GAA also, using similar methods as the LSUAFRP, provides farmers with information the study may contribute to increase the efficiency when transferring information to and receiving information from farmers. For farmers, this study is an opportunity to increase their access to information that they judge relevant.

For students and researchers at Chalmers University of Technology the study gives an insight in how to obtain knowledge of the needs, habits and preferences of a potential user of a certain technology. It also provides the students and researchers with an idea of how to disseminate new technologies to persons that do not have their technical experience.
1.2 **Aim of the study**

The study explores how farmers in the Namo district, Udomxai province, Laos obtain, communicate and relate to new agriculture and forestry information. It examines some aspects of how traders obtain and communicate this information. The study also includes a gender perspective on rural communication by investigating differences between men’s and women’s access to information. Since, to my knowledge little work has been done to link technical and social features, a further aim of this report is to reflect over the methodology and suggest improvements.

Based on these aims, research questions have been formulated. The questions will be answered by conducting interviews with farmers and traders.

The outputs consist of a map and a description of the farmers’ sources of new agriculture and forestry information as well as a description of different aspects of the farmers’ information sharing.

1.2.1 **Research questions**

Below, the research questions are presented followed by a description of how they will be answered.

Questions related to the communication of farmers:

**What actors who disseminate new agriculture and forestry information to farmers and how do the farmers relate to these actors?**

- The question will be answered by asking farmers: where they learned the harvesting and cultivation techniques they use at the moment or plan to use in the future; how they found out about the existence of crops they cultivate and products they harvest at present and who farmers prefer to ask and why when they need information related to harvesting or cultivation.

**How do farmers obtain and use this information?**

- The question will be answered by asking about: the situation pertaining to farmers obtaining information about agricultural and forestry activities; and what they did as a consequence of receiving the information.

**What are the drivers and obstacles for obtaining and using information?**

- The question will be answered asking whether farmers sometimes refrain from acting as a consequence of obtaining new agriculture and forestry information; and, what the farmer expected to achieve by obtaining and using information.
Question related to the communication of traders:

**How do traders obtain and communicate new agriculture and forestry information to farmers?**

- The question will be answered by asking: from where the traders have obtained information about products that they buy from the farmers; and, what information about the product they give to the farmers.

The study aims to propose further areas of study on rural communication and possible entry points to improve communication on agriculture and forestry information in the villages.

### 1.3 Delimitations of the study

The study only includes actors involved in agricultural and forestry communication on district level, not on provincial or national levels. The study aims to examine present or recent communication. Therefore actors that have provided information to the farmers in the past are not included.

### 1.4 Difficulties of the study

Studies examining agriculture communication have previously been carried out in other countries and studies exploring communication in the health area have previously been carried out in Laos. However, this is the first study combining the areas of agriculture and communication in Laos. For this reason, no well-established and tested method for conducting this type of study in Laos exists. The method elaborated was based on and compared with similar studies carried out in Africa and Asia and adapted to prerequisites and conditions in northern Laos.

The subject of the study is abstract. Therefore, it was a challenge to find out ways to concretize the questions asked to farmers. Also language constitutes a difficulty. Information obtained during the interviews often had to be translated back and forth between Swedish, English, Lao and different minority languages.

Although I, through studies and professional experiences, have relevant knowledge in theory and methods for carrying out this type of study, my knowledge in the area of agriculture and forestry is limited. However, meeting farmers, visiting fields, reviewing reports and talking to key informants before conducting the interviews increased my knowledge in the latter area. The insights gained by conducting this study are therefore valuable for further work in the field.

### 1.5 Outline of the report

The report starts with a presentation of Laos and the areas in which the study was carried out. This is followed by a description of relevant parts of the communication theory and the methodology. Thereafter, the results are presented, analysed and summarised in the conclusion section. The report continues with a discussion of the results and the
methodology followed by recommendations for improvements of the technical communication practices and the methodology used. The thesis ends with a personal reflection over the study.
2 Laos


2.1 Geography and climate

Geography

Situated in South-east Asia, Laos shares borders with Thailand and Myanmar in the west, China in the north, Vietnam in the east and Cambodia in the south. Laos is a country of approximately 236,800 square kilometers, or half the size of Sweden, and consists mainly of mountains and rivers. The Mekong river, stretching from the north to the south of the country and forming the border of Thailand, irrigates the lowland plains and is used for fishing and transportation. The Annamite Chain, situated on the border to Vietnam, consists of rugged mountains of between 1500 and 3000 meters in height.

![Figure 2.1 Location of Laos](image-url)
The study was carried out in the two target areas of the LSUAFRP; the main field study in the Namo District and a complementary field study in Ponxay District.

![Figure 2.2 The Namo and the Ponxay Districts, target areas of the LSUAFRP](image)

Namo district is located in the very north of Udomxai province situated in the north of Laos. The district has a good network of roads. Due to the construction of a new road to the Chinese border, Namo district has a dynamic market situation involving several different actors.

The district includes 91 villages. Three of the five target villages of LSUAFRP - Namo Nua, Mixay and Phousang - are included in the study. They are all located along dirt roads and are not ethnically mixed. Different ethnic groups can be found in each village. Because of the large number of different actors related to the market and the homogeneity of the villages this area was chosen for the main study in which farmers were interviewed.

Ponxay district is located in the eastern part of Luang Prabang province, situated in the middle of Laos. The network of roads is limited; the only road stretches from Luang Prabang to the district center. The district comprises 62 villages. Because of good access to markets, several inhabitants earn their living mainly as traders. Therefore this area was chosen for the complimentary study in which traders were interviewed.

**Climate**

Laos has a tropical climate with two seasons: November to April is dry and the temperatures lie between 16 and 21 degrees. The coldest period is December and January. May to October is wet and the highest temperatures, over 30 degrees, occur between March and April. The temperature also varies with altitude; in the mountains, where the study was carried out, the temperatures easily drop to 0 degrees at night during the dry season and stay around 25 degrees during the wet season.
2.2 Population and culture

Population
With a population of 5.4 million people (2001) and 23 inhabitants per square kilometre, Laos constitutes one of the least populated countries in Asia. However, the population is rapidly increasing; more than half of the population are younger than 20. The majority of the population is settled in rural areas, mainly in the Mekong valley. The mountains are sparsely inhabited by hill tribes.

There are over 60 ethnic groups living in Laos, but several groups comprise only a thousand persons. The population can be divided into three categories: Lao Loum is mainly settled on lowland plains and river valleys and constitutes the largest category, representing 65 percent of the population. They migrated to Laos from China around the 11th century. The ethnic group Lao, comprising half of the population of Laos, dominates this category. Lowland Lao also includes other culturally related ethnic groups such as the mountain Thai. They are divide into subgroups named after colours, i.e. Thai Dam (black Thai). Their language, Lao, has become the official language of Laos. By obtaining administrative posts during the French occupation in the beginning of the 20th century, the position of the lowland Lao was reinforced. Today, they politically and socially dominate the country. They live primarily along the Mekong river and make their living mainly from rice cultivation.

The second largest category Lao Theung lives in mountain slopes and constitutes 22 percent of the population. The different Mon-Khmer people constituting this category are the original inhabitants of what is now Laos. They moved into the hills when the Lao Loum migrated to the area. They live essentially in southern Laos or in the north, near the Vietnamese and Chinese borders and live from hunting and slash-and-burn cultivation. Slash-and-burn cultivation is a method used to provide space for cropping by cutting and burning existing vegetation.

Lao Sung, who settled on mountain peaks, comprises 10 percent of the population. Groups of this category migrated from China to the northern mountains of Laos, Vietnam and Thailand during the 19th century. Hmong constitutes the most important group of Lao Sung. As the Thai group, Hmong are divided into subgroups named by colour, i.e. Hmong Khao (white Hmong). They are also organised into different kinship groups – clans - according to their surname. In total, there are 12-13 clans and the kinship bounds within the clan are strong. Even if two Hmong persons belonging to the same clan have never met each other or known each other before, their kinship implies that they will have a close relationship. Another ethnic group belonging to Lao Loum is Phousang. This ethnic group exists in only about four communities in the whole country.

The Lao Sung households consist of either a single nuclear family or a stem family. The stem family is common in Lao Sung groups. It comprise two nuclear families of adjacent generations, that is a son and his family living with his parents. As the Lao Theung group, Lao Sung commonly practice slash-and-burn cultivation.
In addition to these categories, there are also Chinese and Vietnamese minorities. They often earn their living as traders and a large number of the Chinese also work as labour in the north of Laos.

The table below shows the characteristics of the people in the three villages included in the study.

<table>
<thead>
<tr>
<th>Village</th>
<th>Ethnic group</th>
<th>Category</th>
<th>Number of inhabitants</th>
<th>Number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namo Nua</td>
<td>Thai Dam</td>
<td>Lao Loum</td>
<td>439</td>
<td>82</td>
</tr>
<tr>
<td>Mixay</td>
<td>Hmong Khao</td>
<td>Lao Sung</td>
<td>110</td>
<td>14</td>
</tr>
<tr>
<td>Phousang</td>
<td>Phousang</td>
<td>Lao Sung</td>
<td>268</td>
<td>25</td>
</tr>
</tbody>
</table>

**Culture**

The interpersonal behaviour of Lao people is characterized by the fact that one should not “lose face” – show that one is angry - and that one strives to make the other person feel comfortable.

**2.3 History and society**

In 1975 the monarchy was abolished and the Lao People’s Democratic Republic was proclaimed. The Lao People’s Revolutionary Party became the unique party. A strong socialistic and state-controlled economic politics was introduced and cultivation land was collectivised despite considerable protests. During the 1980s, an economic liberalisation was undertaken and in the beginning of the 1990s, the process of transformation into a market economy was initiated allowing for example private ownership again. Although persons that are not members of the Lao People’s Revolutionary Party are allowed to be candidates in elections, it is at present still the unique party and criticism against the political system is not appreciated.

Due to the transition to market economy, the commerce over the borders is increasing and also remote areas of the country are increasingly involved in commerce. The commerce with Thailand, China and Vietnam is important for the economy.

Traditionally, there is a rival relationship between majority and minority people. Some of the minority people believe, for example, that the economic reforms of the government primarily favour the largest population group Lao Loum. There have been rebellions against the government, and the Hmong constitute the main group of protest.

Laos is divided into provinces, districts and villages. Leaders on the two highest levels are chosen by the president, whereas the village committee is appointed on a local level. The village committee is lead by the head of the village and includes representatives of the community based organisations such as the Lao Women’s Union.
2.4 Economy and environment

Laos is rich in forest, minerals and water resources. Electricity, wood products, textiles and coffee constitute the most important exportation products. Although only about ten percent of the land area of the country is suitable for cultivation, most Lao are farmers. The farms are in general small and the production mainly aims to cover the needs of the family. Rice is the far most cultivated crop. Other common crops are vegetables, sweet potato, tobacco, cotton, peanuts, soy beans and maize. Although opium cultivation has been illegal since 1994, opium still is an important crop in the north of Laos.

Approximately half of Laos’ land area is covered by forest. However, the forest cover is, and has been during the last twenty years, rapidly declining mainly due to intensive deforestation as well as slash-and-burn cultivation and other farming systems that are not adapted to the present situation. For rural households, the Non Timber Forest Products (NTFPs), such as mushrooms and medical plants, collected in the forest constitute an important source for food and income generation.

Another important activity for farmers in Laos is livestock breeding. For many households it constitutes the main source of cash income. Buffaloes and bullocks are often used for ploughing and manure is used to fertilise rice fields. Also fish pond culture has increased in importance over the past decades.

Activities in the Namo district

Cultivation, fishing, livestock breeding and collection of NTFPs constitute important parts of the farming system for farmers in Namo district. The most important types of farm land are paddy land, upland rice fields, upland corn fields and various types of gardens, such as home gardens and paper mulberry gardens.

Cash crop production is increasing in the area due to good market access, and the most demanded products on the market are corn, livestock and sugar. NTFPs also constitute an important source of income for the farmers. The most collected NTFPs are the bitter bamboo shoot, het daeng (red mushroom), peuak meuak (vine used for incense) and cardamom.
Namo Nua and Mixay have more paddy fields than upland rice fields. Livestock is an important activity in Namo Nua. In Phousang upland rice cultivation constitutes the most important activity in the village.

**Activities in the Ponxay district**

Beside rice production, other livelihood activities include livestock raising, NTFP collection and production of cash crops such as corn, fruit trees and vegetables. Because of lack of land, fish pond development is limited.

The nearest large market is located in Luang Prabang. There is also a smaller market in the district town, and a mobile market coming to one of the target villages of LSUAFRP every tenth day. Products sold at the markets comprise crops such as job’s tears, sesame and garlic and NTFPs such as po sa (paper mulberry) and peuak meuak.

**2.5 Social situation and infrastructure**

Laos is one of the poorest countries in the world. Only half the population can read and about one fourth of the population lives on less than one dollar per day. The difference between the capital Vientiane and rural areas, where minority people live, is considerable. In rural areas, there are few hospitals, access to electricity is low and the roads usually poorly maintained. In the uplands, where opium is cultivated, drug addiction occurs. There is no social security system.
The education system consists of five years of primary school, followed by three or six years of secondary school. The teaching language is Lao. Three fourths of the children start primary school, but only half of them complete the five years. The average years of schooling is less than three years due to, for example, limited access to schools. As a consequence of a deficient superior education system, Lao has not enough qualified labour. Namo Nua is situated close to the district town and therefore the villagers in Namo Nua have had access to school for a long time. The schools in Mixay and Phousang, on the other hand, were recently built.

The communication network in Laos is not extensive. Gods are transported on roads and rivers. Outside the large cities, the roads are often only passable during the dry season. Laos has both domestic and international flights but there is no railway.

2.6 Gender

The situation of women is to a large extent related to ethnicity. In the lowlands, the positions of both men and women are rather equal. The women participate actively in the society, but it is more difficult for women than for men to attain high positions in society. However, in the Lao Theung and Lao Sung groups, especially Hmong, the role of the women is more traditional. They are for example expected to marry young, follow their husbands and primarily function as a mother to their children.

Women are usually responsible for both farm and household management and have the main responsibility for food in the household. Men often work as labour in other areas, which forces the women and children to work hard in order to replace male labour. One third of the literate people in Laos are women and in rural areas the rate is usually lower. Women in average go to school for a shorter period of time than men. This is due to the preference of sending boys to school while the girls assist their mothers at home.

2.6.1 Gender in agriculture

Both men and women are involved in agricultural and forestry activities, but there are activities that are more frequently carried out by one of the genders.

Cultivation

In rice production, men most commonly prepare the fields by ploughing, making bunds and seedbeds and irrigating, whereas women do most of the weeding, harvesting, threshing and post-harvest activities such as marketing. However, the involvement of women in the traditional male activities is increasing. For other crops, the division of labour is similar, but the planting, spreading of manure, irrigation and harvesting are carried out together.

Forest

Women are most frequently collect the NTFPs such as mushrooms, wild berries, fruits, nuts and medicinal herbs from the forest. There they also collect firewood, which is the most common fuel. Men most commonly cut trees for firewood and hunt in the forest.
**Fisheries**
Both women and men are involved in fishing activities, but women process and market the fish more frequently than men do.

**Livestock**
Cows and buffaloes are cared for by men and women together, whereas women usually prepare food for the animals and feed the pigs and the poultry. They also sell small livestock and eggs in the market. In families with goats, it is the children who are usually responsible for looking after them.

In order to generate income, also other than the previously mentioned on-farm activities are carried out. Women often manufacture woven and tailored products or are active in retail trade. Men often generate income through rice milling, retail and transport activities as well as working as labour.

*Figure 2.4 A woman in Namo Nua is feeding silk worms when others work in the field*
3 Theoretical frame of reference

3.1 Communication

The communication literature proposes various definitions of communication. However, they all agree that communication is a mutual phenomenon, taking place between two or more persons. Information is commonly referred to as one-way communication. The definition below emphasises two aspects of communication that are especially relevant in this study, namely that it is a process including several steps and that it involves both verbal and non verbal messages. According to Hargie at al. (1994), communication is “the process by which information, meanings and feelings are shared by persons through the exchange of verbal and nonverbal messages”.

Due to different views of communication, there are several models describing the different parts of the communication process and their relation to each other. Two main types of models can be distinguished. One illustrates the communication as a linear process between a sender and a receiver, whereas the other describes the process as an interaction or a network of contacts (Larsson, 1997).

3.1.1 Linear communication models

The basic model created by Shannon and Weaver in the 1940s illustrates a sender sending a message through a certain type of channel to one or several receivers. The message affects the receiver in a certain way. The reaction of the receiver can be transferred back to the sender in form of feedback. By giving the sender an insight into whether the message was interpreted in the intended way, the feedback determines whether the communication was successful (Larsson, 1997).

![Figure 3.1: A simple linear communication model (Source: Larsson, 1997, p. 33)]
Three types of message can be distinguished:

- The actual words and symbols constituting the message.
- The meaning attributed to the message by the sender.
- The meaning attributed to the message by the receiver.

The meaning attributed to the message by the sender and the receiver, originates from the encoding and the decoding phase of the communication process (Palm and Windahl, 1989). The receiver can decode the message in three different ways: accept the meaning that the sender attributed to the message, accept parts of the meaning after negotiation or, finally, completely reject the meaning attributed to the message by the sender (Larsson, 1997). Hence, the decoding of the message determines whether the perceived meaning is identical to the intended meaning.

![An extended communication model](Source: Larsson, 1997, p. 33)
By adding individual and social factors affecting the sender and the receiver, the model is extended to take also the context, in which the communication takes place, into account.

The knowledge, communication skills, social background, culture and attitude of the sender and receiver constitute the individual and social factors that influence the communication process. They are present in the encoding and decoding phase and affect verbal as well as non-verbal messages. As will be discussed later in this chapter, one needs to take these factors into consideration in order to communicate effectively (Hargie et al., 1994).

### 3.1.2 Network models

Network models emphasise that communication is an interaction between two or more persons. Instead of considering communication as a linear process, network models describe the process as a horizontal and qualitative contact between persons. Therefore, each person involved in the communication encodes and decodes alternatively and are therefore affected by each other in a system of reciprocal influence (Larsson, 1997). The relation model created by Schramm and others illustrates the interaction between two persons.
The communication taking place in a network is commonly divided into task and socio-emotional communication. The task communication concerns group activities and is closely related to reason and logic, whereas the socio-emotional communication refers to feelings and attitudes of people who are interacting and to how people related to each one another. Consequently, the task communication in a network makes it possible for those belonging to the group to organise themselves and, through co-operative action, solve some common difficulty or reach a desired goal. The creation and maintenance of harmonious interpersonal relationships within the network relies upon effective socio-emotional communication (Hargie et al. 1994).

### 3.2 Effective communication

To be effective, communication should be concrete in order to facilitate understanding for the receivers as well as encourage interaction and create engagement. It should be consistent and focus on essential points. Communication should also be continuous in order to create trust and be coordinated so that the different senders agree on what is to be communicated (Erikson, 1992).

#### 3.2.1 Communication competences

Trenholm and Jensen (2000) explain that effective communication is obtained by communicating competently and summarise the communication skills into five different competences that a competent communicator should have. They include, for example the message competence, that is the ability to use words and phrases as well as gestures and vocal tones in an effective way, the role competence - the ability to know what behaviour is appropriate in a given situation - and self competence - the ability to chose and present a desired self-image.

The interpretative competence, that is “the ability to label, organize, and interpret the conditions surrounding an interaction” is especially important in order to make effective message choices. In a new situation one pays attention also to meaningless details, but a
person with interpretative competence quickly learns what is important and what is not. In order to interpret correctly, one has to understand the situation and the people that one deals with. One must also be able to identify one’s own feelings and needs in order to minimise their affect on a message.

### 3.2.2 Obstacles for communication

Despite being designed according to the previous description, communication might be unsuccessful. There are four main types of obstacles to successful communication:

*Mechanical obstacles* include physical factors, such as disturbing noise or pronunciation difficulties (Dimbley and Burton, 1995). Incorrect pronunciation of words in a language that is not the mother tongue of the speaker may constitute mechanical obstacles.

*Semantic obstacles* are related to language. As illustrated in the section “Field scenario”, words and expression have different meanings for different persons. Age, education and cultural background are examples of factors determining the meaning that one attributes to words and expressions (Dimbley and Burton, 1995).

Since attitudes, values and opinions are active in the decoding stage, they can constitute *psychological obstacles* (Dimbley and Burton, 1995). The mood of the receiver may also constitute an obstacle. When angry or depressed there is a risk that the message is not correctly perceived by the receiver (Robbins, 1993). Participating in an interview that takes time from other tasks that has to be carried out might make the interviewee feel stressed or irritated and therefore perceive the questions incorrectly.

*Filter and perception* constitute obstacles when the sender manipulates the information so that the message is advantageous for the receiver or when the receiver only apprehend what he or she wants to know (Dimbley and Burton 1995, Robbins 1993). Telling a farmer about the positive consequences, such as increased income, of applying a new technique but leave out negative consequences, such as increased need of labour, constitute an example of manipulating information.

As can be seen in the figure below, the obstacles are present in different parts of the communication process. Mechanical obstacles are related to the context, the encoding and decoding. Semantic obstacles are present in the encoding and decoding phases. Psychological obstacles are related to feelings that are a part of the personal factors.
3.3 Communication channels

The channels can be categorised as written or oral. Written channels include, for example, books, newspapers, pamphlets and posters. Meetings, trainings and demonstrations constitute oral channels. In order to achieve effective communication as described in the previous section, the channels may well be combined (Erikson, 1992). Due to their unique functions, the channels are suitable in different situations.

3.3.1 Oral communication channels

Using the oral channel, the sender can personalise the message and send it in a dynamic way (Kreps, 1990). It allows for the receiver to interpret the body language and the tone of voice. Oral communication most commonly constitutes an excellent opportunity for clarifying and asking questions (Erikson, 1992). However, since it is not possible to recall what has been said, the receiver may easily forget or misinterpret the message. As a consequence, problems may arise when complex instructions are given orally (Kreps, 1990).

In oral communication, the relationship between the communicators plays an important role for their behaviour. In a situation of face-to-face communication, such as a discussion between two or more persons, it is, for example, likely that differences in power and status between the participants affect the interaction. Hargie et al. (1994) explain that when people with relatively little social power and inferior status position
interact with those enjoying more power than themselves, the former tend to manifest their inferiority. They do it by, for example, initiating fewer topics for discussion, being more hesitant in what they say, engaging in less eye contact while speaking and being more polite than the other person. This behaviour is a result of the society’s norms and other people’s expectation to how one should act. Not acting according to these norms and expectations might result in a bad reputation or have other unwanted effects for a person. Being aware of the effect that power and status have on the outcome of communication, a person with superior status position can encourage interaction with a person enjoying inferior status position by not emphasising the power difference.

Being aware of the fact that a person considering him- or herself as inferior often act in this way, one can encourage that person to interact more by, for example, not manifesting one’s own power or status. One can also take measures to assure that the behaviour and statements expressed during a discussion will not have unwanted consequences for the other person.

3.3.2 Written communication channels

In contrast to oral channels, written channels are most frequently easily recalled. One can read the message in desired pace and reread complicated section. The risk of misinterpretation is minimal provided that the text is correctly written (Erikson, 1992). However, written channels do not encourage interaction and are not as dramatic as oral channels ( Kreps, 1990). Written channels are suitable for transfer and documentation of data, but not for two way communication (Erikson, 1992).

3.4 Explanative communication

According to Hargie et al. (1994), giving facts, directions, reasons, views and opinions to another person can all be categorised as explaining. In order to explain efficiently, that is making sure that the recipient perceives the information as intended, one should use appropriate terminology, examples and organise one’s ideas. What is appropriate is determined by the social and individual factors of the recipient such as age, background, knowledge and mental ability. Being informed about the characteristics of the recipient, one minimises the risk of giving an explanation that is too complicated or too patronising.

3.4.1 Adapting information to the audience

Planning and presenting are two essential features of a successful explanation. The planning process, during which the content of the explanation is determined, involves identifying the issues that require explanation and selecting the key elements in the issue that is being explained. Thereafter the nature between these key elements should be determined. Finally, it is very important to structure and link the explanation to the background knowledge and mental capacity of the recipient in order to promote maximum understanding.

The planning process should be combined by a selection of which type of communication channels to use for the presentation. Hargie et al. summarise the characteristics of the channels most commonly used in presentations. Verbal explanations usually take place when no aids are available to facilitate explanation. Illustrations are especially useful as...
aids for understanding, for example when one aims to underline important aspects of the explanation. Demonstrations often constitute an appropriate choice of channel when a complex technique or skill is being explained.

Hargie et al. mention several features that are to be taken into account in order to do a successful presentation. One should, for example, strive to speak clearly by using signposts, that are statements that set out a structure for the presentation to come, and avoid hesitations such as “uhm” and “eh”. It is also important to use simple aids to explanation, such as examples, sketches, diagrams and maps or, more elaborate aids such as excursions and placement visits. Since it reveals whether the information was understood, feedback is essential in order to avoid misunderstandings. During oral presentations, feedback can be given to the explainer as comments or questions from the audience. Feedback on a demonstration can for example be obtained by having the observer repeat the demonstration, by repeating the demonstration slowly but giving the onlookers to give appropriate directions at each state or by requesting the viewers to verbalise the main features of the demonstration.

3.5 Intercultural communication

Intercultural communication means interaction between people from different cultures. The word culture can have various meanings, but when talking about communication, culture refers to a life style of a certain group of people. Such a group consist, for example, of the inhabitants in a country, the members of an organisation, the villagers in a village or people with the same profession. A life style includes basic values related to, for example, family, work, society and nature. It also involves habits, knowledge and attitudes. Due to different factors, the communication behaviour vary between different cultures. The meaning of certain words, gestures and behaviours constitute examples of communication features that may differ between two cultures.

When we see people and their behaviour through our own cultural filter, that is assume that their behaviour means the same to them as it means to us, there is a risk that we misinterpret their behaviour. A question about the family, asked in order to be polite and show interest for the family, might, for example, be interpreted as poking. Not looking in the eye of the communication partner might be interpreted as nonchalance although it was intended as a way of showing respect.

Another difficulty relevant in intercultural communication is that the meaning of a word is not objective. As earlier mentioned, the sender attributes, according to his or her previous experience, knowledge and values a certain meaning to a word, whereas the receiver interpret the word according to his or her previous experience, knowledge and values. Hence, the meaning of a word is mainly created by the persons communicating. Since the individual and social factors differs between cultures, there is a risk that the communicators put different meanings into the same word and thereby misunderstand each other. One way of avoiding such misunderstandings is to express more clearly than usually or, before a discussion, agree on the definition of special words that are likely to occur during the discussion.
Being aware of one’s own communication behaviour, for example why we attribute a certain meaning to a certain word, increases the awareness of how people from other cultures communicate. Consequently it also promotes effective communication in that it facilitates understanding and correct interpretation (Nilsson and Waldemarson, 1994).
4 Methodology

4.1 Research strategy
There are five major research strategies in social sciences; experiments, surveys, archival analyses, histories and case studies. Each research strategy can be exploratory, descriptive or explanatory. The choice of strategy to use is based on three points: the types of research questions asked, the extent of the researcher’s control over the behavioural events that are being studied and the time of development of the events (Yin, 1994).

Research questions starting with “what” are usually considered to be exploratory, whereas questions including “how” or “why” can, most commonly, be categorised as explanatory. Comparing the different types of research strategies mentioned above, a case study is suitable choice when “a ‘how’ or ‘why’ question is being asked about a contemporary set of events over which the investigator has little or no control” (Yin, 1994).

The definition of a case study as “an empirical inquiry within real-life context, especially when the boundaries between the phenomenon and context are not clearly evident” implies that this research method is especially suitable when contextual conditions are important to take into account for the phenomenon studied (Yin, 1994). Therefore a combination of exploratory and explanatory case study strategy was chosen for this study.

4.2 Qualitative or quantitative
Information transferred by words is usually referred to as qualitative information, whereas information transferred by numbers most commonly is referred to as quantitative information. Quantitative data quantifies a characteristic, that is quantitative data mainly aims to describe the extent to which an opinion, an attitude, an event or a behaviour occurs. Instead of focusing on the frequency, qualitative data mainly aims to describe a characteristic (Merriam, 1998).

Qualitative data consist of detailed descriptions of situations, events, persons and observed behaviours. It also include direct quotations stated by a person and illustrating his or her experience, attitudes, opinions and thoughts as well as paragraphs from different types of documents (Merriam, 1998).

A qualitative research method is useful when situations, individuals or circumstances surrounding a phenomenon are to be described. Therefore this study will be carried out using a qualitative method (Remenyi et al., 1998).
4.3 **Preparing for the field study**

According to Yin (1994), when conducting a case study, it is important to have basic knowledge about the issues being studied. This will help the researcher to focus on relevant events and information during the field study. However, one should avoid having presupposed opinions, derived from theory or other people’s opinions. Having presupposed opinions about the issues being studied implies assuming that the persons included in this study act and think in a certain way. Avoiding presupposed opinions is difficult, if not impossible. However, in order not to influence the answers of the respondents one should strive to be neutral and not-judging during the interviews no matter if the answers may contradict one’s own opinions and values.

**Translation**

Since I and the interviewees do not speak the same language, the interviews were carried out together with an interpreter. For this reason, preparatory discussions with the interpreter constituted an important part of the preparations for the field study. Apart from increasing my knowledge about the culture of Lao people and information retrieval methods commonly used during field studies in rural Laos, the meetings also constituted an occasion for me to present the study and its purpose to the interpreter. Since the interpreter was the link between me and the world that I studied, it was indispensable that we, before undertaking the field study, as far as possible agreed on for example what information is important to translate and the meaning of words that probably would occur frequently in the questions and answers. This is to minimise the risk for misunderstandings between us and the risk that important information is lost in translation. Examples of subjects discussed are objectives of the study and meaning of concepts used in the study, type and duration of the interviews, methods for retrieving information from the interviewees, level of abstraction of the questions, number of questions, location and duration of the interviews.

4.4 **Data collection**

Collecting evidence from the studied environment constitutes an important part of a case study. According to Remenyi et al. (1998) evidence may be obtained from six different types of sources: documents, interviews, direct observations, participant-observation situation, physical artefacts and archival records.

Based on their different characteristics and advantages, documents, direct observations, group interviews and individual interviews were judged suitable methods for collecting evidence for this study.

4.4.1 **Documents**

Documents are useful for obtaining background information of the context and the environment of the study. They are also useful for comparing data from other sources and for verifying spelling and titles. It is important to remember that documents are written for other purposes than the study that will be carried out. Therefore they may not accurately reflect the situation (Remenyi et al., 1998).
Before going to the field, some parts of the agriculture, forestry and socio-economic studies previously carried out in Laos as well as some parts of studies of AKIS in other development countries were studied. As examples can be mentioned studies carried out in the previous phase of LSUAFRP, reports on crops of current interest and reports of preparations for on-farm experiment going on in the villages at the time for the interviews. These documents were read through in order to achieve information on the work carried out by the programme that I represent respectively find discussion topics that were of current interest for the farmers.

During the interviews, a list of the households in the area of study constituted a valuable document. It included name, ethnicity, wealth rank and participation in on-farm experiments and served as a base for selection of the interviewees.

After the interviews, information obtained in the interviews was compared with information in the documents in order to check if they correspond.

4.4.2 Direct observations
Merriam (1994) mentions several factors to observe such as the environment, the participants, activities and interactions of the participants, frequency and duration of different situations and non-verbal messages. Observing these factors includes for example exploring what behaviours are encouraged and discouraged in the environment of the interviewee and examining the role of the interviewee. The observations can take place for example during interviews and work in the field.

Before going into the field, observations of rural villages, farming activities and on-farm experiments served to gain an insight in the Lao culture and environment as well as the work of LSUAFRP.

Observations were also carried out in the field at the same time as the interviews. They constitute a valuable complement to verbal information received in the interviews and served to compare data from other sources of evidence. Non-verbal messages and interaction between persons present during the interviews constitute examples of factors observed during the interviews. Studying the activities of farmers in the village and in the field between the interviews gave valuable information related to differences between the roles and behaviour of men and women.

4.4.3 Interviews
Interviews are an important source of information in a case study because it allows the researcher to examine human affairs. These human affairs should be viewed through the eyes of the interviewees; a respondent therefore provides the researcher with important insight in a situation (Yin, 1994). The aim of the field study is to gain insight in to the farmer’s impressions and opinions of the different information sources and the farmer’s use and assessment of the information from the sources. For this reason, interviews constitute a suitable method for data collection.
Interviews may be open-ended, semi-structured or structured. An open-ended interview inquires both actual facts of a matter and the respondent’s insight into certain occurrences (Yin, 1994). In this study, open-ended or semi-structured individual and group interviews with farmers and traders constitute the main methods of data collection. The questions are further described in the section “Questions”.

If the questions mainly examine the respondent’s insights, he or she is referred to as an informant. Key informants are persons with experience and knowledge specifically related to the subject of the study (Yin, 1994). Researchers at NAFRI, employees of the LSUAFRP and other rural development programmes as well as representatives of DAFO and PAFO constitute examples of key informants for this study.

Meetings with key informants were held before going into the field in order to obtain knowledge about the area of study and previous experience with the farmers in the area. Although often useful, one should be critical towards information obtained from informants since these insights are second hand information and may be biased (Remenyi et al., 1998). Information concerning farmers’ attitudes, habits or values described by a person that is not a farmer constitute an example of second hand information that may be biased.

Although interviews constitute an essential part of a case study, they are only verbal reports. This implies that the information, due to, for example, poor and inaccurate articulation and listening, may be biased or misunderstood (Remenyi et al., 1998). The respondents might also have difficulties recalling specific data (Yin, 1994). Therefore the data obtained this way should be compared with data from other sources of evidence such as documents and observations (Remenyi et al., 1998).

4.4.3.1 Translation

As previously mentioned one person - hereafter called main interpreter – translated between English and Lao during all the interviews. Another person was often needed to translate between Lao and the minority language of the interviewee, hereafter called local interpreter. These two stages of translation are described and commented in the following section.

English - Lao

As mentioned above, preparatory discussions were held with the main interpreter before going into the field.

Since the interview questions were mainly based on the answers of the respondent, the exact questions and the order, in which they were asked, were formulated during the interview. Therefore, they could not be exactly translated in advance. This implies that the translation was carried out simultaneously. However, the basic questions, concepts and possible answers were thoroughly discussed with the main interpreter in advance. Also, although the structure of the interviews and the exact questions were not completely determined in advance, a common structure was rapidly distinguishable.
The questions and answers were not translated word by word. Instead, the main interpreter used her own words to explain the questions and summarize the answers. Apart from illustrating examples, also gestures, physical objects and sketches were sometimes used by myself, the translator or the interviewee to clarify questions and answers.

**Lao - Minority language**

A local interpreter was present during all of the interviews. In most interviews, this interpreter was needed to translate parts or occasionally all of the conversation, but in some interviews this step of translation was not needed at all.

The local interpreter most commonly was a representative of the village committee such as the head of the village. During other interviews a teacher or another person with good knowledge of Lao - occasionally in combination with the partner of the interviewee - functioned as interpreter. In total, six different persons actually served as local translators. The common denominator was that they originate from the area where the study was carried out. All except one of them live in the respective villages of the interviewees.

Since the local interpreters were chosen on place, they were not explained the topic in advance and did not take part in the preparatory discussions that were carried out with the main interpreter.

The frequent change of interpreter implies that the number of interviews, during which they were present, vary. The person present at the highest number of individual interviews attended eight, whereas the person present at the lowest number of interviews attended two.

### 4.4.3.2 Selection of interviewees

There are two main types of selection of interviewees; probability selection and non-probability selection. The latter type of selection is suitable when there is no way of assuring that each individual element of the population will be represented in the selection. Therefore non-probability selection was chosen for this study.

The most common type of non-probability selection is criteria related. It is suitable when one desires to discover, understand and gain insight about a phenomenon. When applying criteria-related selection to a case, one has to describe the criteria that have to be fulfilled in order for an individual to be included in the study.

The criteria-related selection includes several types of selection, such as comprehensive, extreme, typical and quotation selection. The first type of selection implies that all individuals in the population relevant for the study are interviewed, the second that a few persons representing opposite types of individuals within the selected population are interviewed and the third that the interviews are carried out with individuals possessing the characteristics that are typical for the population included in the study. For this study quotation selection was chosen. It implies that the main and relevant subgroups in the
environment that is going to be studied are chosen. Thereafter, an arbitrary number of
individuals from each category are selected for the study (Merriam, 1994).

After discussion with key informants at LSUAFRP and the interpreter, it was assumed
that ethnicity, gender and wealth were likely to affect the communication behavior of the
farmers and therefore these groups constitute the subgroups of farmers that are relevant
for this study. Three different ethnic groups are represented in the five target villages of
LSUAFRP in the Namo District. Therefore, these three ethnicities were chosen as the
relevant ethnic groups for this study. The relative wealth of a farmer is indicated by a five
grade scale, elaborated by the socio-economic department of NAFRI. Grade 1 equals
wealthy and 5 equals poor. The farmers’ choice of cash crops, NTFP activities and
participation in on-farm experiments were also, to a certain extent, taken into account
when choosing interviewees.

4.4.3.3 Participants of the interviews
During all interviews – both group and individual interviews - several persons were
present. Apart from myself and the interviewee, there were also the interpreter translating
between English and Lao, a representative of NAFRI and a representative of DAFO that
was especially involved in the LSUAFRP on a district level. A person from the village,
often a representative of the village committee, was most commonly present and when
necessary functioning as the local interpreter. During most of the interviews, also two or
three Lao students, carrying out research in some of the villages, were present. Often the
partner of the interviewee, children and neighbours also joined the meeting.
The representatives of NAFRI and DAFO were present for bureaucratic reasons. They introduced us and the study to the head of the village and - based on their previous experience of field studies - made sure that the study, from a bureaucratic point of view, was carried out in line with the standard procedure of the LSUAFRP. The role of the representative of the village was to facilitate the understanding between us and the interviewee, but also to show to the interviewee that the study was carried out in approval with the village committee. The students carried out agriculture-related experiments in the villages. They regularly visited the villages and had established a relationship with some or several of the inhabitants. They were present both because they wished to learn from the study and because the already established relationship with the villagers could facilitate our interviews.

4.4.3.4 Group interviews

The Farming System Research and Extension approach (FSR/E) adopted by LSUAFRP encourage the use of Participatory Rural Appraisal tools (PRA-tools). These tools are commonly used in agricultural planning to involve local communities in several phases of a project process such as problem diagnosis, planning and evaluation - not only as sources or receivers of information. The purpose of the PRA tools is to facilitate communication and understanding between the researchers and the local community by creating a common language (FAO, 2003). By encouraging farmers to take active part in decision making and evaluation, the tools also aim to encourage and develop critical thinking and problem solving (FAO and World Bank, 2002).
There are various tools, suitable for different stages of a project and for different purpose. A seasonal calendar diagram – created by participants drawing up seasonal calendars to explore and document seasonal changes during the year – and a village resource map – on which villagers have marked objects that they consider important for the village constitute two examples of such tools (FAO, 2003).

There are several tools that can be used to map local groups and institutions and their interaction. The purpose of a Venn Diagram is to learn about the importance of local groups and institutions and a Relationship Diagram is used to identify key institutions and the relationships between a community, village or interest group and these institutions.

The purpose of the discussion groups in this study was to identify the sources of information used by the villagers to receive information about new agriculture crops and techniques. Therefore a map similar to the previously mentioned diagrams was to be drawn together with the participants. For participants that are not used to writing, objects – such as stones, grains or branches - representing persons and institutions can be placed on the paper.

**Procedure**
In order to encourage all participants to express their opinions, the groups were – according to the advice of a key informant with previous experience of group interviews
with farmers - separated by gender and wealth. They were also separated according to ethnicity.

Since the village meeting place constitutes the place where groups of villagers usually gather for formal discussions and exchange of information, this is where the discussion groups were held in order for the participants to feel comfortable. A large white paper was placed on the table and the participants were given color pens. After an introduction including the same information as in the individual interviews and an explanation of the map to be created, the participants nominated one person to do the drawing. This person was asked to draw a symbol representing the group in the middle of the paper. Thereafter the participants were instructed to suggest symbols of persons, organizations or institutions that had taught them about a new crop or technique used in agriculture and these were then drawn. Thereafter, a short discussion about the person, organization or institution mentioned by the farmer followed.

**Differences of information**

Group discussions were only held in two of the three villages included in the study, namely Namo Nua and Phousang, not also in Mixay as planned. This is due to the outcome of the first group discussion held in Namo Nua where the participants mentioned the on-farm experiments offered by DAFO staff within the LSUAFRP as the only sources of information. All participants stated that, apart from their parents, they could not come to think of any other sources of information. All of them also agreed on that none of them had ever told their husbands about anything that they learned related to new crops or techniques. These two statements sounded unbelievable although the women insisted on that it was true. Although all women several times were encouraged to participate in the discussion, there were a few women who talked a lot while others mainly agreed.

However, the following day individual interviews were carried out with some of the participants of the discussion group. During the individual interviews they stated that they always tell their husbands about new crops and techniques, explaining that they must have forgotten to mention that the previous day. They also, contrary to what was stated in the discussion group, gave examples of several sources of information.

The conclusion was drawn that the differences of information given in the two situations were due to the group setting and group dynamics. Therefore, it was decided to only carry out individual interviews. However, group discussions were tried again in Phousang due to difficulties of explaining questions and understanding answers. By visualising the subject of discussion on a paper and encourage discussion between the farmers themselves and interaction with us, the mutual understanding was facilitated.

**Map-making**

After an explanation of the map-making in the Namo Nua woman discussion group, one woman took a smaller paper and write down the sources of information on a list instead of using the large sheet of paper with colour pens.
In the male discussion group in Namo Nua and Phousang the sketch-making was carried out as planned, although the sources of information were written with letters instead of drawn as a symbol. In Namo Nua a farmer in the group was selected to hold the pen, in Phousang the teacher wrote down the information given by the farmers.

The women in Phousang seemed hesitant when introduced to the task while gathering around the sheet of paper and colour pens. Therefore, it was decided to use natural objects such as stones and branches as symbols for the sources of information. In order to engage all of them in the discussion, they were asked to place one symbol each and explain why they put them on the paper.

![Image](image.jpg)

**Figure 4.3 Stones represented information sources in the woman group interview in Phousang**

The fact that one woman in Namo Nua wrote a list instead of drawing a map, and that the male farmer wrote down the sources instead of drawing symbols, might indicate that the choice of visualisation of the subject was too simple for the Tai Dam farmers. Since the teacher was the person writing in Phousang, it is difficult to determine the male farmers’ opinion of the sketch. The map making with natural objects facilitated the understanding between us and them.

### 4.4.3.5 Individual interviews

**Procedure**

The interview was initiated by a presentation of me and the purpose of the study, the duration of the interview and the value of his or her participation. Permission to record the interview in order for me to remember what had been said was requested and it was
explained that there were no wrong answers. The interviews lasted between half an hour and one and a half hours and ended by thanking the interviewee for his or her time and for giving me valuable information. Several times, the interviewee was invited to ask me questions after the interview.

There are several factors that may influence the outcome of an interview. In order for the interviews to be successful, the researcher should strive to create flexibility, trust, engagement, understanding and validity during the interviews.

4.4.3.5.1 Creating flexibility
Easterby-Smith et al. (1997) recommends that one adapts the qualitative interview to issues and ideas evoked by the respondent during the interview. This adaptation of issues implies that the researcher must have a theoretical framework for the interviews, but not be too tied to it. A checklist including issues relevant for the interviews may serve as a loose structure for the questions. During the interview, one should attempt to cover all issues on the list, but not necessarily in the same order (Easterby-Smith et al., 1997). One should also be aware that unpredicted information, that may become relevant, may be received during the interview (Yin, 1994).

Bringing up the issues on the checklist in the prepared order might be especially useful when encountering interviewees that briefly answer the questions without adding extra information. However, when the interviewee is talkative, one can take advantage of the additional information and follow up interesting leads at that point or soon thereafter. By talking about issues that interests him or her, the respondent might give answers to several of the points on the checklist (Lofland and Lofland, 1995).

Although insight and understanding can be obtained with unstructured interviews, there is a risk that the researcher is overloaded with different opinions and information that seems to have no common denominator. Therefore, a combination of un-structured and semi-structured interviews often is to prefer to a purely un-structured interview.

Questions
A checklist consisting of two parts was prepared as an aide-mémoire. The first section included obligatory points of information such as age, ethnicity, and number of children, whereas the second section consisted of issues related to the objectives of the study that preferably should be covered during the interview. With these issues in mind, suitable draft questions to the farmers and the traders were prepared before the interviews and formulated during the interviews.

Farmer interviews
The questions were based on the activities of the farmer, i.e. what crops he or she cultivates or what NTFP he or she collects. The questions were most commonly further explained and made concrete by giving examples. Since these activities vary between farmers and since the farmer him- or herself chooses what activities to mention in the beginning of the interview, the questions posed in the different interviews were not identical.
Activities constituting the base for the interviews were identified by asking:

- What are your present activities?

After discussing the present activities, the following questions were, in case the time allowed, asked for the same purpose as the previous question.

- Are there any new activities that you are interested in?
- Are there any new activities that you are not interested in?

The type of secondary questions asked based on the activities mentioned by the farmer and their purpose can be illustrated by an example.

A farmer has stated that he is interested in a new type of corn. The secondary questions and examples of what these questions aim to find out might be:

- Why are you interested in this type of corn?
  - Expectations on information
  - Attitude towards the source of information

- How did you find out about the crop?
  - Sources and channels of information

- Have you heard about the crop also from someone else? Have you seen it somewhere else?
  - Access to information

- Will you start cultivate? If no, why not?
  - Motivation to and obstacles for use of information
  - Preference of source and channel of information

- Do you know everything you need for starting to cultivate this type of corn? If no, how will you find out and why this way?
  - Access to information
  - Preference of source and channel of information

- Have you told anybody else about this type of corn? If so, describe the situation.
  - How information is shared between farmers

These questions based on the activities mentioned by the interviewee were often complemented with questions about issues brought up by other respondents in previous interviews. The use of pesticide, the access to village meetings and crops such as corn and watermelon constitute examples of such issues.
Trader interviews

The structure of the trader interviews is similar to that of the farmer interviews. The questions were based on the activities of the trader, i.e. products that the trader sold or bought. Since the activities of the traders, like those of the farmers, vary and the traders chose what activities to mention, the questions posed to the different traders were not identical.

The activities of the trader as well as ideas for further questions were identified by the question:

What products do you sell and buy?

And if time allowed:

Are there any new products that you are interested in selling or buying?

A trader buying Job’s tears from farmers might, for example, be asked the following secondary questions:

What do you tell the farmers from whom you want to buy?
Where do you find the information you need about Job’s tears?
Do you know how to cultivate and harvest Job’s tears in order to obtain the quality demanded at the market? If so, how did you learn how?
What do you do if you do not know the suitable cultivation and harvesting technique?

When necessary, the questions were further explained and made concrete by giving examples.

Creating flexibility in reality

I noticed that I easily got lost in details that were not relevant for the purpose of the study. Always having the issues of the check list in mind helped me to focus on relevant questions to the interviewee.

The choice of basing the interview questions on the activities of the individual farmer seems to constitute a suitable choice. Since it implies that questions have to be formulated and information received simultaneously, it may imply problems like lack of time to formulate questions. However, due to the time of translation that was usually not a problem. Without a phase of translation, the questions might have needed to be more prepared in advance.

However, all issues on the checklist were not covered in all interviews. The reason is for example that issues previously brought up in the interview took a long time. One way of attempting to cover all issues with all interviewees would be to meet several interviewees a second time instead of carrying on the planned interviews. But because the interviewees
had to be selected one day in advance and, since participating in an interview implied losing one day of work in the field, many farmers had little time to participate in the interviews, it would not be possible to meet all farmers a second time. Therefore it was chosen to meet all farmers only once.

4.4.3.5.2 Creating trust

Developing an open and trusting relationship between the interviewee and the interviewer facilitates the information exchange. The creation of such a relationship is simplified if the respondent feels he or she might gain from the information exchange (Easterby-Smith et al., 1997).

Easterby-Smith presents some practical advice for the researcher on how to develop a trusting relationship. The first advice is to acquire knowledge about the activity of the interviewee and the second is to use an appropriate language. The third is to, in order to avoid the risk of asking leading questions, let the interviews and data collection take the time it needs. Since relationships take time to form, one might consider doing a series of shorter interviews with one or several persons (Easterby-Smith et al., 1997).

Easterby-Smith states that a relationship with the interviewee is often most rapidly developed when the interview starts with a general discussion about the professional activities of the interviewee (Easterby-Smith et al., 1997). To facilitate the establishment of a personal and trusting relationship, asking about the family of the interviewee is also a good way of starting an interview. The initial phase of the interview should also include the purpose of the study as well as background of the researcher (Lofland and Lofland, 1995).

The location of the interview and the social interaction between the interviewer and the interviewee is important for the outcome of the interview. The interviewer as well as the interviewee is likely to draw conclusions about the other person due his or her way of dressing, acting or talking. The look and behaviour of the interviewer may for example influence the respondent’s willingness to cooperate (Easterby-Smith et al., 1997).

If bringing a gift, it is recommended to give it after the interview. This is due to the possibility of misinterpretation of the reason for the gesture. If given before the interview, it might be interpreted as a bribe for receiving certain answers, whereas given afterwards it is likely to be estimated as a symbol of appreciation of his or her participation (Lofland and Lofland, 1995).

Creating trust in reality

In order to develop a friendly relationship, I tried to show my personal interest in the life and habits of the interviewee. When arriving to the house of the interviewee, I often informally asked the farmer – by the use of gestures or via the interpreter - something related to the house or family that caught my attention when I entered the house. Also to promote a trusting relationship with the interviewee, I made sure to explain the purpose of the study, why I was interested in his or her participation and how he or she might gain from participating.
In order to show my appreciation for the respondents taking time to participate in this study, I brought posters, post cards and stickers from Sweden that I planned to give after the interviews. However, after discussion with key informants, I decided not to because of possible unwanted consequences such as jealousy between persons receiving different types of gifts or suspicion about my motive for giving gifts. The fact that gifts are usually not given to participants in interviews conducted by the organisation and institution I represented also contributed to the decision. Instead I was suggested to bring candy to give to the respondent and other persons present at the interview. The candy seemed to be appreciated.

4.4.3.5.3 Creating engagement

In order to obtain information – especially relevant information – one has to be able to ask good questions (Easterby-Smith et al., 1997). Yin says that asking good questions demands an inquiring mind during – as well as before - the interviews. Lofland and Lofland concretize the meaning of an inquiring mind by explaining that during the interview one constantly has to think about “probing for further explication or clarification of what is now being said, formulating probes that link current talk with what has already been said, thinking ahead to asking a new question that has now arisen and was not accounted for in the guide (plus making a note so that you will not forget the question) and attending to the informant in a manner that communicates to her or him that you are listening” (Lofland and Lofland,1995).

Creating engagement in reality

Participating in an interview implied that the farmer could not work in the field that day. This constituted a problem mainly in Mixay. The interviews were carried out during harvesting time in Mixay. Therefore the farmers had a lot of work to do in the field. Several farmers seemed to have limited time to participate in interviews because of lost time of work in the field and some farmers seemed stressed because they lost a day of work. This might have affected their interest in the study and the questions.

I noticed that the interviewee seemed to lose concentration and interest in the conversation when the time between his or her answer and the next question was too long. This waiting time was due to translation in several steps and additional explanations and clarifications that were often needed in both directions between me, the interpreter and the local interpreter. As the interviews went on I tried to reduce that time by postponing the additional explanations that I needed, but that were not directly necessary for the continuation of the interview, for afterwards.

During the interviews, I tried to figure out if the interviewee was more interested in something special and thereby base the discussion on that subject. Woman, whose children took up most of their time and energy, constitute an example.

The previously mentioned candy brought as a gift also served to calm and distract children that were striving to obtain the full attention of their parent participating in the interview. To a certain extent, this facilitated the participation of the respondent.
Since I look very different from the interviewee, I dressed discretely and put my hair up so that the difference is not as marked. The purpose was to avoid that the interviewee was distracted.

In order for the respondents to feel comfortable, the interviews were held in their home. However, the farmers sometimes mentioned that they could not remember how they learned something or what information they were given at a certain moment. It also became clear that a large amount of the information transfer took place in the field. Therefore, we proposed to the heads of the village to follow some of the interviewees to the field. Then interviews could then be held without the farmer loosing time of work and the environment might help to evoke memories. However, it was not possible to follow the farmers. One explanation was that when going to the field, the farmers do not know when they plan to come back to the village. Another explanation was that if joining a farmer collecting firewood, the farmer would not be able to go as fast or as far as intended.

4.4.3.5.4 Creating understanding

In addition to asking good questions, one should also be a good listener and accurately interpret the answers (Yin, 1994). According to Yin, a good listener is one that notices and remembers not only the actual words pronounced by the interviewee, but also the type of words used and the feeling that is put into the words. It is also important to take in non-verbal signs like eye movements or a changed facial expression (Easterby-Smith et al., 1997).

Interpreting the answers may imply translation to another language, but it also includes reflecting over the meaning that the interviewee consciously or unconsciously attributes to the words and phrases (Easterby-Smith et al., 1997). The previously mentioned verbal and non-verbal signs provide a large amount of valuable information for the interpretation (Easterby-Smith et al., 1997). Since it allows the interviewer to ask follow up questions, the meaning of the statements should preferably be interpreted immediately during the interview. There might, for example, be statements that are contradictory to previous statements which the researcher therefore should investigate more thoroughly during the interview (Yin, 1994). Certain body movements or discomfort are signs that might imply that incorrect information is given (Easterby-Smith et al., 1997).

Creating understanding in reality

Relating the purpose of the study and the interview to the farmer’s everyday life constitutes an example of concretising information in order to facilitate the understanding. Instead of saying that I hope one of the outcomes of the study would be that the farmers’ access to information about new crops and techniques would be facilitated, I exemplified by relating it to recently learned techniques or crops that other farmers had mentioned they wanted to know more about.

Although the basic questions were open-ended, they were in reality frequently complemented by examples of possible answers. In order to as little as possible influence
the answers of the interviewee, the examples were as often as possible based on objects and issues evoked previously during the interview. Possible answers to the question “How did you find out about the new type of cucumber?” could be exemplified by “You mentioned that your parents thought you how to cultivate maize and that you saw the new type of corn in the market. Did someone tell you about the new type of corn or did you see it somewhere?”

Before going out into the field I had learned some basic, polite words and phrases in Lao and after a number of interviews I had also learned some Lao words frequently used in the discussions, such as corn, rice and “no have”. Since it sometimes allowed me to have an idea of what the interviewee brought up a little before the information was translated, I had more time to prepare the next question. It also facilitated the translation in that it also prepared for the subject.

4.4.3.5.5 Creating validity
In order to avoid bias of the information, one should avoid projecting one’s personal feelings or preconceptions into the situation (Easterby-Smith et al., 1997). Leading questions, that are questions asked in a way that reveals what the researcher considers being a preferable way of answering, should be avoided (Lofland and Lofland, 1995). By assuming a neutral attitude towards the answers of the respondent and formulating the questions in ways that does suggest a certain answer one avoids leading questions. The respondent may for example be asked to describe his or her view of a situation or to reflect over a hypothetical situation.

In order to verify that one has understood the answers correctly, it is useful to, from time to time, summarize what has been said and ask the interviewee to correct or clarify the summary if there are parts that are not correct (Easterby-Smith et al., 1997).

Thinking about and around the questions and answers takes up most of the time during a qualitative unstructured interview. Therefore the time for taking notes is limited. Since it allows the researcher to listen through the interviews several times and review certain parts repeatedly, Lofland and Lofland recommend the use of a tape recorder. However, using a tape recorder, also entails a risk that one does not listen to the interviewee properly assuming everything is on the tape. The ultimate way of doing the interview, according to Lofland and Lofland, is to combine the use of a tape recorder with sparse notes by writing down key words, key sentences, key names etc during the interview. That way, one also has the basis for the interview in case the tape recorder should fail to record (Lofland and Lofland, 1995).

Creating validity in reality
Analyses during and after study
I recorded the interviews for the purpose of transcribing the conversations, but when undertaking the work of analysing I realised that basing the analysis on my notes was more suitable. When listening through the interviews, I, most of the time, had difficulties to hear what was said, or I was not able to hear anything at all, due to factors like the location of the microphone and the number of persons talking simultaneously. However,
during the interviews I took notes containing what I, at the moment, judged to be the most important issues. I found useful to re-listen to some conversations and compare my notes with what I could hear on the tape, but most of the information that I believe might be valuable - and that I did not already have on my paper – was in other languages than English.

While conducting the interviews, I realised the importance of discussing not only the meaning of answers expressed during the interviews and that were unclear to me, but also comparing my impressions of other aspects of the interview with the ones of the interpreter. Questions discussed were for example: Did people present during the interviews influence the answers of the interviewee? Did the interviewee understand the questions in the way that I intended?

Possible bias of information
Already in the first interviews I realised that I was not sure that I had understood the answer correctly. In order for me to be sure that I understood an explanation or story told during the interviews and also in order to give the interviewee the possibility to object, I found very useful summarising the answer and ask if it was correctly understood.

Before going into the field, I planned to, every evening, in detail write up the interviews carried out during the day, but I soon realised that there was simply not enough time, since each interview took me closer to two hours to write. I also found myself exhausted most of the evenings, which made it difficult to work intensively also in the evening. Therefore I concentrated on asking for and writing down additional explanations of issues discussed during the interviews and that I had not fully understood. However, due to not writing up all the interviews right away, there is a risk that some information might have been forgotten or biased.

When preparing the interviews, I read not only documents containing general information about the area of study, but also reports of studies similar to this study that had been carried out in other development countries. I also asked key informants about their view of issues brought up in the study and their personal experiences in the concerned area. The information that I in this way obtained concerning the acting and thinking of farmers in both Laos as well as in other parts of the world, might have created some presumptions that influence my analysis.

4.5 The Laos case study
A preparatory phase in Sweden preceded the two month field study in Laos. Besides adjusting to the culture and climate, the first two weeks in Laos were spent Vientiane and Luang Prabang reviewing documents, meeting actors involved in rural development and preparing the farmer interviews.

The third and fourth week the main study - including the farmer interviews - was carried out in the Namo District. This was followed by a week of analysing the interviews, preparing for a short presentation and for the complementary field study in the Ponxay District. The last two weeks were spent reviewing interviews, preparing for a presentation
and comparing the findings with other sources of information, such as written documents and key informants.

4.5.1 Preparing for the field study

During the preparatory phase, I was presented to employees at NAFRI and persons involved in the different on-going projects in cooperation with NAFRI in order to get an overview of the activities of the institution. Formal and informal meetings were arranged with key informants such as researchers at NAFRI, employees of the LSUAFRP as well as other rural development programmes. They were asked to describe and give their view of the area and subject of the study and also asked to give feedback and suggestions for improvements of the proposed method and the focus of the study. Also various documents - mainly reports of research previously carried out in the northern part of the country, including the Namo District – were studied during this phase.

Through the LSUAFRP, I got in contact with an English and Lao speaking person that had the possibility to join me in the field during two weeks. This person also had previous experience of carrying out field studies. As a step in the preparations for the farmer interviews, meetings with this interpreter were held.

In order to get an overview of the activities carried out within a project, I participated in the Technical Meeting of IUARP\(^1\). It included a field visit to three villages involved in on-farm experiments and presentations of different cropping systems. The meeting also constituted an occasion to meet persons involved in the on-farm experiments in Namo District.

\(^1\) IUARP is a research programme similar to LSUAFRP and whose target areas are located in Luang Prabang province.
4.5.2 Main field study

In order to obtain background information about activities in the villages carried out by institutions and organisations, the farmer interviews were preceded by one day of meetings with key informants: the head of PAFO in Udomxai, DAFO in Namo as well as representatives of GAA in both of the previously mentioned towns.

For administrative and practical reasons, the duration of the field study was limited. The time limit taken into account, it was decided to spend three days in each village. The day proceeding the first day of interviews in each village, the purpose of the study was presented to the head of the village. During this meeting – as in the end of each of the following days of interviews - the names of the persons selected for the interviews the following day were handed over to the head of the village. In general, four individual interviews or two group discussions were carried out per day. Group interviews with farmers were carried out in two of the three villages of the study.

Most of the evenings were spent reviewing the interviews carried out during the day as well as preparing for the following day. The reason for reviewing the interviews each evening was to - while I and the interpreter still remembered the conversation with the interviewee – make sure that I had understood the answers correctly, and if necessary, ask the interpreter to clarify certain answers, give additional explanations or compare our impressions of the interviews. The preparations for the following day consisted for example of reflecting over whether the questions could be formulated in a better way or whether any issues that had been brought up during the day would be especially interesting to ask other interviewees about.
4.5.3 Complimentary field study
The study was extended to include also interviews with traders and farmers that were heads of community-based organisations. Ponxay district was chosen because of its proximity to Luang Prabang (where I was located at the time) and, as earlier mentioned, because of its large number of traders. During two days, three traders and three heads of community-based organisations were interviewed. I also took part in field work, weaving and evening activities in the villages. Apart from myself and the interviewee, also the head of DAFO, Ponxay, and an interpreter (not the same person as during the main field study) translating between English and Lao were present. As in the main field study, neighbours, relatives and/or children were present during most of the interviews.

4.5.4 Data collection
Although observations, as mentioned earlier, were carried out during and between the interviews, interviews constitute the main method of data collection during the field study. Therefore, this section focuses on the selection and the characteristics of the interviewees and the procedure of the interviews.

4.5.4.1 Interviews
Based on the choice of spending three days in each village, it was, together with the interpreter, decided to carry out one day of group interviews and two days of individual interviews in each village. It was judged possible carry out two group interviews or four individual interviews during one day. The three days in Namo Nua were initiated by one day of group interviews followed by two days of individual interviews. In Mixay, all of the three days were spent carrying out individual interviews. In Phousang, two days of individual interviews were followed by one day of group interviews.

4.5.4.1.1 Selection of the interviewees
Group interviews
In the first village where group interviews were carried out, Namo Nua, 7 women representing all wealth categories and 7 poor men were selected for the group interviews. In the second village where group interviews were carried out, Phousang, 5 women and 5 men representing all wealth categories were selected.

The reason for choosing a lower number of participants for the second round of group interviews was to facilitate for all the selected interviewees to actively participate. In contrast to the first group interview, men from all wealth categories were mixed in the second group interview. Since the group interviews in the second village were carried out the last day it was not possible to - in individual interviews - further explore issues evoked during the group interviews. Therefore it was important to receive the opinions of farmers from all wealth categories. In Namo Nua there was no noticeable difference in results related to mixing or not mixing farmers from different wealth categories. For these two reasons it was chosen to include representatives of all wealth categories in the men’s as well as in the women’s group interview.
**Individual interviews**

Applying the quotation selection, four men and four women from each ethnic group were selected for the individual interviews. Each of these men and women also represented different wealth categories. In total, 24 farmers were selected. As mentioned above, these names were presented to the head of the village the day before the interviews was to be carried out. He then informed the interviewee.

However, several times the selected person was not available for the interview. Sometimes the head of the village in advance knew that the person would not be available and another person could be selected. Other times it was revealed at the time for the interview. Sometimes the selected person had arranged so that another member of the family could participate instead and sometimes nobody showed up. For this reason the resulting selection of interviewees differs from the in advance prepared selection. In total, 27 individual farmer interviews were carried out and the number of interviewees from each of the three subgroups was:

- **Ethnicity:**
  - 8 Thai Dam (Lao Loum)
  - 11 Hmong Khao (Lao Sung)
  - 8 Phousang (Lao Sung)

- **Gender:**
  - 13 men
  - 14 women

- **Wealth categories:**
  - 1: 9
  - 2: 8
  - 3: 3
  - 4: 8
  - 5: 3

Since the population within the target villages of LSUAFRP is homogenous, the interviews were carried out in three villages.

### 4.6 Analysis of the data

There are two main methods of analyzing qualitative data: content analysis and grounded analyses. The first method emphasizes the frequency with which a phenomenon occurs whereas the second method mainly aims to distinguish patterns and contradictions. While qualitative data is sorted into categories elaborated before data collection, the themes and patterns in a qualitative analysis are derived from the collected data. Therefore the grounded analysis is used in this study (Easterby-Smith et al., 1997).

Easterby-Smith describes the grounded analysis as a process consisting of seven stages, especially useful for interviews that have been written down. The data collection and analysis takes place simultaneously. Therefore each of the seven stages may be undertaken several times. The stages are:
1) Familiarization
While re-reading the transcripts one should focus on both recorded information - the words and phrases expressed during the interviews - as well as unrecorded information such as the attitude of the respondents and the accuracy of the data.

2) Reflection
In this stage one should compare the data with previous research, academic texts and commonsense explanations. The purpose is to reflect over whether the data collected in this study challenge or support already existing data.

3) Conceptualization
Conceptualization aims to distinguish concepts that seem important for the understanding of the phenomenon or situation studied.

4) Cataloguing concepts
Having established that the concepts do occur in the explanations of the respondents, the aspects of the interviews are sorted into the different concepts.

5) Re-coding
At this moment, one should look at the statements of the respondent in order to find out whether respondents might have interpreted similar concepts in different ways.

6) Linking
In stage, empirical data is linked to more general models by repeatedly comparing the literature with the collected evidence. In order to check the arguments and supporting data, it is useful to have the draft reviewed by others at this point.

7) Re-evaluation
Based on comments receives in the previous stage, some parts of the draft may need to be reworked. This last stage is commonly repeated several times (Easterby-Smith et al., 1997).

Analysis in reality
When analyzing the data, I spent most time dealing with the first and the last steps of the procedure. The first step was undertaken already in the end of each day of interviews. The interviews were also re-read after having conducted all farmers interviews (the main field study) as well as after having completed the data collection. The attitude of the respondents and the accuracy and reliability of the data were frequently discussed with the interpreter.

A question I asked myself during the second phase was for example: Is it correct that women often are underrepresented in activities such as village meetings and study tours and if so, what is the reason? I compared my own impression of the situation with information from documents and key informants.
In the third and fourth stage concepts such as transfer of information, search for information and constraints for use of information were discerned. By alternating between the third and the fourth step the concepts were amended several times. The recoding-stage was undertaken simultaneously.

In the two last steps, the findings were written down and compared with the communication theory as well as with the historical and present situation in Laos. The findings and explanations were also discussed with the key informants that gave me advice and feedback on the method before going to the field. The draft was also reviewed by supervisors in Sweden and Laos.

4.7 Quality of the study

In order for a study to have an effect on the studied phenomenon, the results have to be valid and reliable. The quality of a study can be determined by discussing the validity and reliability of the instruments used in the study, that is how the information was collected, analysed and interpreted. In a case study, the critical mind of the researcher and his or her mental presence during the data collection as well as the methods of collecting data, the critical attitude towards explanations, the triangulation of information and the interpretation are factors determining the quality of the study (Merriam, 1994).

Validity

The study can be evaluated from an internal and an external validity point of view. Internal validity is related to the extent to which the results correspond to reality, that is how trustworthy the results are. There are several tactics to assure internal validity: apply triangulation, maintain a chain of evidence and have the draft reviewed by key informants. Triangulation implies that the information obtained from one source of information is compared also with other sources of information. Maintaining a chain of evidence implies explaining how the conclusions were drawn by, throughout the report, describing all steps and include all information leading to the conclusions (Merriam, 1994; Yin, 1994).

In this study, triangulation was applied during data collection in that information obtained from the farmers was compared with observations and information from documents and key informants. By, in this report, including relevant information of Laos and communication theory, describing the method used as well as presenting and analysing the results the steps towards the conclusions are visible. The draft has also several times been reviewed by key informants and supervisors.

External validity refers to the generalizability of the study, that is the extent to which the results are applicable also in other situations than the investigated situation. In order for the results of study to be applicable also in other situations than the investigated situation, the investigated situation must be described in detail. (Merriam, 1994; Yin, 1994).

The area of study and conditions for the farmers living in this have been described in detail in order for the reader to be able to determine whether the results are valid in other situations that the situations explored. As clarified in the introduction, this study was...
carried out in target villages of the LSUAFRP. Therefore, certain results of the study are probably not applicable on farmers living in villages where this programme does not organise any activities. The farmer interviews were carried out in the Namo District which is characterised by its proximity to the Chinese border and its good network of roads. For this reason, some results may not be valid in areas with characteristics that differs from the Namo District.

**Reliability**
Reliability is related to the extent to which the results obtained would be obtained if the same study was carried out again. One method of increasing the reliability of a study is to create a case study data base, that is to, while conducting the study, write down how all the steps are carried out. Another way is to use triangulation.

As earlier mentioned, triangulation was used in this study. During the study, notes were also taken about for example when and why meetings were held as well as what decisions were taken and why.
5 Results and analysis

The major part of the results is constituted by examples of what the farmers have said. The farmers’ statements have been divided into ten different categories. A presentation of the farmers’ sources of information is succeeded by a description of the information channels used to disseminate information to farmers. This is followed by sections describing the farmers’ transfer of and search for information as well as constraints for the use of information. Then, the farmers’ experimentation with and comparison of information is illustrated. Finally, gender- and wealth-related aspects of the farmers’ communication practices as well as the farmers’ current need of information are presented.

5.1 Sources of information

The figure below shows the sources of agriculture and forestry information on a district level mentioned by the farmers. The two-ways arrows illustrate that information flows not only in one single direction but in both directions between the actors.

![Diagram of farmers' sources of information](image)

Figure 5.1: The farmers’ sources of information on a district level.

The different sources of information are used for different purposes. The statement of one of the farmers illustrates the most common opinion:

“Parents are important because they taught me everything. Traders are important because they know about the price. DAFO are important because I will remember the technique forever”.

Several farmers stated that before DAFO came to the village, they considered the traders to be the most important source of information on harvesting and cultivation techniques.
because of the traders’ knowledge about the market, both price and technique to use in order to obtain the demanded quality. Now these farmers consider DAFO to be more important because the DAFO staff can explain and teach the farmers new techniques. However, a few farmers also stated the opposite; information from the traders is still more important than the information from DAFO.

Below follows a presentation of the different sources, the type of information they provide to the farmers and the media most commonly used. The description is based on the farmers’ statements.

5.1.1 Governmental organizations (GO’s)

**District Agriculture and Forestry Office (DAFO)**
The organization was mentioned by all farmers. DAFO provides the farmer with technical information, i.e. new and improved techniques for cultivation, as well as information concerning land use and government policies. The farmers gave examples of learning new techniques for vegetable and fruit tree cultivation by DAFO. Media used to diffuse information to the farmers are training and demonstrations, study tours and farmer field days.

Some farmers state that DAFO’s reason for providing them with information is to improve the farmers’ livelihood and well-being, improve their land use and decrease the time of labour. Several farmers stated that they are interested in more information from DAFO and that they prefer DAFO to other sources of information on products and techniques that they find interesting. Several farmers also mentioned that they are interested in participating in on-farm experiments next year. The reason mentioned is that the farmers believe that DAFO has a lot of valuable knowledge. They explained by giving examples of new crops and techniques, such as the two-season corn and fruit tree plantation, that were introduced by the LSUAFRP revealed to be successful.

A few farmers in Namo Nua also gave examples of techniques, such as a new way of raising frogs, introduced by the LSUAFRP and that was revealed not suitable for the area where they live. However, since, according to these farmers, the vast majority of the techniques introduced by the LSUAFRP have been successful, they state that they are very interested in participating in on-farm experiments also in the future.

5.1.2 Non governmental organizations (NGO’s)

**German Agro Action (GAA)**
A farmer in Mixay mentioned that he participated in a cinnamon demonstration carried out by GAA and as a result, he started a small cinnamon plantation. He also explained that GAA continues to give technical support to the farmers involved in the cinnamon plantation in Mixay. Therefore he would contact them in case he would have problems with the plantation.
5.1.3 Traders

5.1.3.1 A farmers’ point of view
Middle traders serve as a link between the individual farmers and the market or the large trader companies. When talking about traders, the farmers - and therefore also this report - refer to middle traders. According to all farmers that have been in contact with traders. The traders provide the farmers with information concerning access to the market, price of the products and usually information on how and when to harvest or cultivate in order to obtain the quality demanded on the market. They sometimes also provide the farmer with information about where they should look for the NTFPs.

Traders also constitute the only mentioned sources of information for fertilizers or pesticide. According to the farmers that bought pesticides, the traders give instructions on how to use and for which crops to use them and for which crop, but seemingly nothing about effects on health or soil.

A farmer in Phousang said that she bought fertilizers or pesticide in the market. The trader told her how to dilute it, how much to put and that it should be kept away from children. She said that “if it is good for the vegetables, I will use. If it is bad for the vegetables, I will not use.” She does not believe that it is dangerous and will continue to use it until she sees negative effect on crops, health or soil.

When several traders inform about the same NTFP, the techniques suggested by the different traders are identical, according to a farmer. He states that he has met and talked to many traders passing on the road near his house and they all provide the farmers with the same information about how to harvest. This was also stated by other farmers.

Several farmers mentioned that since traders know about the price and quality demanded at the market, they constitute the most important source of information for learning new techniques, especially information related to NTFP. A farmer in Phousang explains

“Before, we only had small scale activities for producing food for ourselves and exchanged products in the neighbour village. We learned how to harvest and cultivate from our parents. Then traders came here and proposed how to harvest in order to have a good price at the market. We followed the technique of the trader, had a better price at the market and started large scale.”

5.1.3.2 A traders’ point of view
Introducing new crops and techniques
When desiring to buy a certain type of crop from the farmers, a trader sometimes gives farmers seed to plant and comes back at harvesting time to buy the yield. How do the traders decide which crops to ask for or introduce to the farmers? According to all the traders, the larger trader companies, to who they usually sell, ask them for a certain product. Thereby they know that this crop is demanded at the market and they ask the
farmers for the same crop. One trader explained the chain of demand for Job’s tears: “A company in China asked the company to who I sell. Then they asked me.”

One trader explained how the price of a product usually is determined.

“I know how much the trader company will pay me for a certain crop. Therefore I know how much I can pay the farmers. I ask the farmers how much other traders have proposed to pay them for a certain product. Then I, if I can, offer them a slightly higher price. In several villages I also know some farmers that tell me what price other traders have suggested.”

She explained further that since the price at the market changes all the time it is difficult to know which price to propose. She also added that since she considers other traders to be competitors, she has no contact with other traders active in the same area and therefore never discusses prices with colleagues.

As previously mentioned the traders usually give farmers recommendations on cultivation and harvesting techniques. In order to obtain good quality and thereby higher prices when selling the product to the trader, the farmers, according to a trader, usually follow the technique proposed. However, this is not always the case. A trader gave an example of why farmers chose not to follow the proposed technique. “I told the farmers how and when to harvest paper mulberry. In order to receive a high price, it should be harvested when young. However, some farmers do not care about looking for suitable plants; instead they harvest a lot but obtain various qualities. They seem to prefer quantity instead of quality or maybe they do not understand. But then I pay them less.”

Need of information

According to the traders, the trading companies most commonly provide them with information on harvesting and cultivation techniques. The middle trader is also sometimes showed an ideal example of the product in question. According to one trader, the techniques proposed by different companies are identical. However, the company does not always have enough knowledge about suitable harvesting or cultivation techniques. Therefore they give incomplete information to the middle trader. The middle trader buying from the individual farmer therefore cannot always give accurate information to the farmers. As a consequence, the farmer does not have enough knowledge of how to obtain the requested quality of the product.

The traders’ occasionally deficient knowledge of harvesting or cultivation technique is illustrated by a trader in the Ponxay district. In case the trader company to which he sells does not give him enough information about a product, he often searches for additional information before telling the farmers. “When the product is a crop I often asks DAFO for advice, and when it comes to NTFPs, I ask someone with a lot of experience of collecting NTFPs.”

The trader described how he obtains good quality peuak meuak: “I first tell four to five farmers the technique that the company told me. When they come back from harvesting I
say: ‘this is good quality, this is bad’. Since the company showed me a product of good
good quality, I know what they should look like”. He continued by explaining that he firstly
tells “leader farmers” - farmers that have a lot of influence and that other farmers trust
and look up to. This way the techniques will be spread also to other farmers. He said that
he sometimes also goes to the field with the farmers to demonstrate.

Another trader, who does not ask other sources of harvesting and cultivation techniques
than the trader companies, described her method of obtaining peuak meuak of good
quality. “The company showed me a product of good quality, and gave me some
information on how it should be harvested and dried. I told this to the farmers, who went
to the forest to collect the peuak meuak. The quality of the products I received varied;
some were of good quality and some were of less good quality. When I received a
product identical to the product I was shown by the company, I told the farmers with
products of less quality to follow the technique of the farmer who obtained the requested
quality.”

Some traders stated that they are interested in agriculture information from other sources
than the large trader companies. One trader in the Ponxay district stated that the trader
companies provide her with enough technical information but said that she “would be
very interested in receiving more information about what type of crops and which
techniques are most suitable for cultivation” in the area where she is active.

5.1.4 Farmers

Family
All farmers stated that their parents have provided them with basic knowledge in
agriculture, including cultivation and harvest techniques. Most farmers stated rice
cultivation as an example of what they had learned from their parents. Several farmers
mentioned brothers, sisters, parents in law and cousins as sources of information.

The eldest daughter of a family said that she was interested in fish culture. The family has
a fish pond and she sometimes goes to the pond with her father to help and learn. The
father shows and explains: “Do like this to have good quality. The fish will grow fast and
you will have a good price at the market”.

Almost all farmers in Mixay say that they receive a large amount of information from
members of the same clan. Several farmers are interested in growing rubber tree and they
have all heard about the new crop from their respective relatives in the neighbour
province, belonging to the same clan as themselves. Most of these farmers also stated that
if they start a successful activity, the first person that they would tell about the new
activity is a member of the same clan or family.

Neighbours
Neighbours include farmers in the same village or in other villages. The interviewees
gave examples of learning how to cultivate water melon from farmers in the
neighbouring village. One woman in Phousang said that other women tell her about
techniques and she therefore considers other women to be her most important source of information.

5.2 Channels for diffusion of information

5.2.1 Oral channels

5.2.1.1 Trainings and demonstrations

The most preferred channels for receiving technical information are trainings and demonstrations. All farmers mentioned that this is the way they learned traditional cultivation techniques from their parents. It is also the channel used to teach farmers cultivation techniques used in the on-farm experiments. All farmers having participated in training and demonstrations carried out by project staff state that they found it easy to understand. Several farmers that have not had the occasion to participate in training and demonstrations carried out by the project staff stated that they were interested in learning new techniques by doing. A farmer in Namo Nua summarized the opinion of these farmers by explaining that it is easy to understand how to do things when “you can see, ask and try at the same time”.

Some farmers mentioned the difficulty of finding the time to participate in trainings and demonstrations. Some farmers, participating in on-farm experiments, stated that they had difficulties finding the time to take care of the experiment plot and follow the technique proposed for the experiment.

5.2.1.2 Study tours, cross visits and farmer field days

These methods are appreciated by all farmers, since it gives them the possibility of discovering and comparing new products and techniques. Apart from being exposed to new crops and techniques, the farmers are also given the opportunity to discuss with and learn from other farmers. However, several farmers stated that these occasions of receiving information have to be combined with training and demonstrations, since the previously mentioned method do not provide them with the practical experience.

The farmers in the men discussion group, Phousang, explained:

“The study tours are important because they provide us with knowledge that we did not have before and we can compare the techniques learned from our parents. We usually believe in the new techniques suggested by DAFO because they are often quite similar to the techniques used by our parents, but for example the distance of the seed differs. To learn the new techniques we prefer training and demonstrations, since it is easier to understand how to do when we can try, and ask at the same time as we are shown.”

However, several farmers mentioned the limited number of participants as a weakness of this method. As for training and demonstrations, farmers mentioned that it could be difficult to find the time to participate.
5.2.1.3 Meetings

The village meeting is the channel through which the farmers receive most of the information provided by GAA, DAFO and traders. These are held in the village meeting place. Since the information often concerns all of the villagers, the village meeting is used to diffuse the information to as many farmers as possible.

Several farmers say that information received only by listening, for example during a meeting, is difficult to remember. A woman in the discussion group, Namo Nua, explains why: “When I listen to somebody, I do not need to use my head and think myself; therefore it is difficult to remember what has been said”

The statement of a farmer in Mixay indicated the importance of using instruction tools that are adapted to the preferences of the audience when holding a presentation. The farmer went to a meeting including a presentation of the on-farm experiments but did not become interested in participating. However, when he later saw the seeds used in the experiments, he became interested. He said that DAFO showed a poster of the seeds at the presentation of the on-farm experiment, but it was not until he saw the seeds themselves that he became interested in participating.

The method of informing the farmers that a village meeting is going to take place differs between the villages. In Namo Nua and Phousang the head of the village informs the committee of the village, who in turn informs the households. In Mixay, the head of the village ring the school bell five minutes in advance. The farmers that are in the field at the time do not have the possibility to attend the meeting.

Meetings between farmers themselves take place in several places. One woman in Phousang said that she often discusses with other women, for example, when going to work in the field.

5.2.1.4 Video Compact Disc (VCD)

Using a VCD player, VCD’s can be viewed as a movie on a TV. The farmers stated that the number of farmers possessing a TV and a VCD player is extremely limited in their villages. However, many farmers mentioned that they knew someone that possesses the machines.

Several farmers have seen VCDs, but few farmers have seen VCDs related to agriculture. A farmer in Namo Nua indicated the popularity of VCD by saying that “if he received agricultural information from a VCD at home, the house would immediately be filled with farmers and they would all stay to discuss the program”.

Also other farmers were positive towards the use of VCD. A farmer in Namo Nua, who has seen a VCD concerning health care, provided to them by a health care project, said that “it was nice to watch and easy to understand how to do if a child is sick”. However, by pointing to the fact that this media does not allow for asking questions, she also pointed to a weakness of VCD. She continued by saying that when learning a practical
task such as new cultivation technique, she would prefer learning by training or demonstration.

One farmer in Mixay mentioned that he has seen agriculture information on VCD. Before his wife died, he often had time to go to Namo town and see agriculture programs at a friend’s house. But after his wife died, he no longer has time to go there and does not know where to find that type of information. A member of the village committee of Mixay adds that he has discussed agriculture VCD with other farmers in the village and that several farmers are interested.

5.2.1.5 Radio
In Namo, most of the farmers never listen to the radio and the number of radios is very few. In Ponxay, however, the access to radios is good and one farmer says that several farmers listen to agriculture news. He said that personally he finds an emission that includes reports about successful farmers very useful. “I remember the name of the farmer and when possible I go to visit him and ask him more about his activity”

A farmer in Namo Nua mentioned that he sometimes listens to radio at a friend’s house, but once he returns home, he has forgot everything.

5.2.2 Written channels
5.2.2.1 Books, pamphlets and posters
Several farmers mentioned that they can not read. Because of difficulties to read, several farmers stated that they were not interested in printed material. However, some literate farmers were interested in printed material.

A few farmers in Namo Nua mentioned that they prefer receiving agriculture information from books, pamphlets and posters because they can choose when to take part of the information. A woman explained why she likes to learn from books: “It is easier to remember when I learn myself, compared to when other persons tell me something. I also like books because I can review the information when I have forget details”. Another farmer says that he is very interested in books or posters with pictures. However, they both stated that they do not know where to find the printed material. The woman said that the only books that she has is a children’s books from school. The man has asked other farmers for books or posters, but did not find any printed material.

A young farmer in Mixay had to help at home instead of going to school and therefore has not learned how to read or write. However, she has seen the school books of her brothers and sisters and if she could read, she would like to learn more about agriculture from books.

5.3 Transfer of information between farmers
Situation and method
As previously mentioned, information is shared between farmers through oral communication channels by the use of demonstrations or personal meetings. Several
farmers described that practical information related to agriculture most commonly was transferred in the field - learning by doing - and part of the information transfer takes place during meetings elsewhere.

A young woman in Mixay fully occupied with child care and housework explained that since she has no time to work in the field, she has no possibility to learn more about agriculture at present. “Look – here are only houses and the fields are far away. How could I do?” Another farmer agreed with the previous speaker in that her parents taught her cultivation techniques and knowledge related to the crops at the field. She added that she sometimes also learnt about agriculture when the family discussed during dinner.

A farmer in Mixay said that when his cousins came to Mixay they told him that he should start growing rubber because of the good income it will generate and they also described the technique to use. However, the interviewee said that at present he does not know enough to start a rubber tree cultivation, but if he would decide to start cultivating, his cousin will come to Mixay and stay there in order to practically teach him how to do during the cultivation process.

Several farmers in Phousang stated that they are interested in two-season corn and will ask farmers that participated in on-farm experiments for help. One farmer revealed that he is interested in cultivating the two-season corn after having seen it in the fields in the neighbour village and asked about information from the owner. He did not participate in the on-farm experiments using the same type of corn, but next year he is interested in cultivating. He will ask the farmers that participated in the experiments this year, because they – in contrast to DAFO – are closer and can help him in the field.

Several farmers also mentioned that they have learned new techniques in the field from a family member that has participated in training and demonstrations for on-farm experiments.

**Difficulties of transfer**

The statements of some farmers in Mixay indicated that it is difficult to transfer their knowledge to other farmers without first having practical experience of using the information themselves, i.e. have internalised the information. Having used the information, they also have a concrete object, i.e. a tree or a plant, to refer to when explaining.

Another farmer in Mixay illustrated this with an example. Since he is quite old and cannot work in the field anymore, he has a lot of time to visit other places and persons and receive information on new products and cultivation techniques for crops such as orange tree, sugar cane, tee and pumpkin. He continued by saying that it is a pity having all this knowledge but not being able to give it to other farmers. He clarified by saying that before he can explain something to another person, he need to put the theoretical knowledge into practice, and since he no longer has the physical prerequisites for working in the field he cannot obtain the practical experience on his own. However, his brother, who still has the physical prerequisites for working in the field, often comes with
him when he visits other villages and consequently obtains more or less the same information. By joining his brother when he puts his theoretical knowledge into practice and also contribute with his knowledge, the farmer will gain some practical experience and thereby become able to share his knowledge with other farmers.

A woman in Phusang said that her husband usually receives information from traders about harvesting techniques for NTFPs. Since she is the one harvesting, her husband has to explain to her what the trader said. She usually finds it difficult to understand the instructions second hand and does not always obtain the quality demanded by the trader.

5.4 Search for information

5.4.1 Discover a new product or technique

The farmers usually become aware of new products and techniques in two ways: due to another person’s initiative to tell or show them, or due to seeing something that interests them, without the intention of searching for it. Several farmers also stated that they saw a new type of crop at the market and asked the trader where to find seed and how to cultivate.

“Before DAFO came here, I did not think of changing anything” a man in Phousang explained. “The yield of natural corn was enough. I would not have changed variety if DAFO had not come”. These statements illustrate the passive attitude that many farmers seem to have concerning search for information on new products and techniques. However, several farmers stated that the trader proposed techniques for certain crops sold at the market.

Seeing and asking

A young woman in Mixay gave an example of becoming aware of a new crop by seeing it. On the way to the market in the neighbour village, she saw a field of Job’s tears, which she had never seen before. In the village she happened to hear a conversation of a group of farmers talking about the access to the market of Job’s tears and understood that one of them was the owner of the field. She became interested in cultivating the new crop and said that if she decides to start cultivating Job’s tears, she will look up the owner and ask him about the cultivation technique.

A woman in Numo Nua told how come she changed variety of cucumber: “I was on the way to the field and passed a field of cucumber of high quality. I asked the owner about his technique of cultivation, and also if I could have some seeds”.

An old farmer in Mixay said that now when he is at the end of his life and cannot work in the field, he has time to travel to other provinces to look at the environment and have new experiences. On one of those travels, he saw a fishpond and got very interested but since he did not meet the owner he looked at the types of fishes and how the pond was dug, so that when he came back to Mixay could dig one of his own.
A farmer in Phusang told how come she included pesticide/fertilizer in her cultivation technique for vegetables. “I saw a woman on the field next to mine putting something on the vegetables so I asked her what is was. She explained that it makes the vegetables grow fast, and obtain good quality and also told where I could find it.”

Several farmers in Phousang mentioned that they became interested in participating in the fruit tree experiment because it was new to them. One farmer explained: “I had never seen such a big area of fruit trees before”. But the reason to participate is to have fruits to eat and sell.

Several farmers gave examples of asking and being asked for information from other farmers. Most farmers state that when they have started an activity that became successful, they have, on their own or the other persons initiative, told other farmers about it. A farmer in Mixay, who has fish ponds, said that he has explained the technique and shown the fish ponds to several farmers. Another farmer in Mixay said that, if he starts cultivating rubber tree successfully, he will tell other farmers how to do. However, he will only tell farmers that ask him for information since “if they do not ask I do not know what they want to know”.

Hearing
A trader providing farmers with a new techniques of harvesting an NTFP or a farmer telling another farmer about a product he or she started to cultivate or a successful technique he or she uses, constitute examples of information that is provided to the farmers without the farmer demanding for it.

A farmer in Phousang gave an example of changing variety of a crop due to information from a trader. When selling corn to a trader, he told her about a new variety of corn that could generate high prices on the market, but not where she could find it. Therefore, she was interested in participating in on-farm experiments where the same type of corn was to be used.

Working as labour
Another way of learning is to work as labour. Several men in Namo Nua stated that they have worked as labour in neighbouring villages. One farmer explained that he learned how to cultivate watermelon when working as labour in the neighbour village. Some women in Namo Nua mentioned that they currently learn how to cultivate rubber trees by working in a rubber tree nursery in the neighbour village.

5.4.2 Expectations
What do the farmers expect to achieve by growing a new type of crop or adapting a new technique? The farmers mentioned several factors that motivate them to use the information received and they are all related to their livelihood and increasing their income. Apart from a direct increase of income, for example due to a higher price when selling at the market, the farmers mentioned factors that indirectly will increase the income, such as reduced labour time, improved land use and better future for the ir children.
Several farmers in Phousang gave examples of expecting an increase of income and reduced labour time as a result of cultivating a new type of crop. Black Ginger was introduced to the farmers in Phousang by a trader coming to the village to ask if anybody cultivated and could sell the crop. The trader told the farmers that there is an important demand for Black Ginger at the market. Later on, the farmers from Phousang discovered a plot of Black Ginger in the neighbouring village and the owner of the plot told the farmers that the cultivation did not demand a lot of labour.

A farmer in Phousang gave an example of becoming interested in a crop due to expected increase of income. He participated in fruit tree and corn experiments, but stated that he was not very interested in the crops when joining the experiment. However, a trader told him about the demand of this type of corn on the market. As a consequence, he became very interested in learning the technique because next year he plans to extend the small plot to a large plot and sell at the market. He is also interested in collecting NTFP’s, since – according to himself – this demands much less time of labour than the work in the field.

Another farmer in Phousang mentioned improved soil fertility as a reason for wanting to participate in the fruit tree experiment. Since he plans to eat the fruit, not sell, he does not expect an increase in income. He stated that he is very interested in learning the technique because when the children are older he will tell them what techniques are good and which are bad.

Another farmer in Phusang also mentioned that he is interested in cultivating the two season corn because it will lead to reduced time of labour, higher yield and more income. A farmer in Phousang said that when he will have land, he will ask for information on crops from “somebody that has made a lot of benefit”.

Several farmers stated that they learned a certain cultivation or harvesting technique from their parents, but when a trader proposes another technique, they prefer to follow that technique. As one farmer explained: “The trader knows about the market. Therefore we will have a better price if we follow the technique of the trader”.

The eldest daughter in a family said that in the future “I would like to grow cucumber large scale and sell at the market to earn money” She continued by telling that about once a week she goes to the market with her mother and often they buy cucumber. She said the most expensive products are cucumbers, oranges and bananas.

Improved future for the children is also mentioned as a reason for learning about new products and applying new techniques. The women in the discussion group, Phousang, said that they are very interested in learning new techniques from sources outside the village, because they would like their children to have more alternatives of cultivation techniques and more knowledge than their parents could transfer to them.
5.5 Constraints for use of information

There are several reasons why the farmers do not use information, that is why they do not act in a certain way when obtaining information. The main factors are related to the resources of the farmers. The vast majority of farmers mentioned access to land, money and labour as determining factors for to how they will act as a consequence of receiving information.

A farmer in Namo Nua gave an example of not being able to use information due to lack of land. He said that he saw the project’s demonstration for fruit-tree plantation from a distance and became very interested in participating in the experiment. His wife is familiar with the technique since she works at the fruit-tree plantation of her brother – who participates in the on-farm experiment - but due to lack of land, they cannot start their own plantation. Some farmers in Namo Nua also stated that they are waiting for their parents or parents-in-law to divide land to them. Therefore they can not use information about new crops or techniques.

Another reason for not using information is the need for further information. A farmer in Mixay said that his relatives gave him a lot of information about growing rubber tree, both concerning the cultivation technique and access to the market. He would like to plant rubber tree this year, but said he does not have enough knowledge. Since he also has no time to look for more information, he will not be able to use the information that he already received.

A third reason for not using information is related to the power of decision making. A farmer in Namo Nua said that her sister told her about a new variety of cucumber. This woman only works as labour for her father-in-law and he is the person in the household taking the decisions about what is going to be cultivated. She said that she will not propose the new variety to him; therefore she will not act as a consequence of receiving information.

5.6 Experimenting with information

Several farmers gave examples of experimenting or planning to experiment with techniques learned for one crop, in order to use it for another crop. This is illustrated by the following examples.

Last year, a farmer in Namo Nua started to plant mulberry. This year, she participated in the fruit-tree experiment and thereby learned a new technique for cultivation of fruit trees. Next year she will apply the technique learned in the fruit-tree experiment for her mulberry plantation. She does not know if it is going to be successful, but she will try.

A farmer in Mixay said that he participates in the on-farm experiments in order to learn as many techniques as possible. His purpose is to, later on, teach his son who cannot participate himself due to his studies. Thereby the son will have several techniques to choose from when he will start to cultivate on his own. Since in the future other crops than at present will be demanded at the market, the farmer believes that the son will use the techniques for other crops than the ones learned in the experiment.
A farmer in Phousang stated that he wanted to participate in the experiments in order to learn techniques that he can apply on other crops.

### 5.7 Comparison of information from different sources

When the farmers have access to several sources providing them with information on the same product, they often compare the information in order to use the cultivation technique that is most suitable to their purpose. The comparison is made by testing and looking.

**Testing**

A farmer in Mixay, whose purpose of changing variety of and cultivation technique of corn was to find a crop that generates at least as much income as opium. He said that a trader, on his way to sell the two-season corn on the Chinese border, passed and stayed over night at the house of this farmer. He told the farmer that cultivating this new type of corn generated even more income than opium. He also described how to cultivate and where the farmer could find seed. The farmer called a village meeting and informed the villagers about what the trader had said. Everybody was interested in trying the new type of corn and several farmers planted it according to the technique recommended by the trader. However, this type of seed was also introduced by DAFO for the on-farm experiments. This farmer participated in the experiment, and thereby learned also their technique, but at the same time he planted a small area of seeds in the way that the trader had suggested. The main difference between the techniques was the distance between the seeds. Since the outcome of both techniques was the same, but DAFO’s technique demand fewer seeds per area unit of plantation, next season he will apply the latter technique for a large-scale plantation.

**Looking**

A woman in Phousang said that at village meetings, her husband sometimes receives information from traders on how to harvest a product in order to obtain high quality. The husband tells her what the trader said and she applies the proposed technique when harvesting. However, she often finds it difficult to understand exactly how to do. When going with other women to the market to sell, they compare their harvested products and the techniques they have used. Thereby they find out which technique generates the highest quality of the harvested product. In case she is still uncertain of how to harvest in order to obtain high quality, she asks the trader for advice when she sells the harvest.

### 5.8 Gender and information

**Village meeting**

Women seem to have less access to information diffused at village meetings than men. All women stated that their husbands participate in the village meeting more often than they do. While a few women said that they are not interested in participating in village meetings, the majority stated they would like to participate more often if the time of the meeting was suitable to them.
A man in Namo Nua stated that “who goes to the meeting depends on what has to be done at home. Therefore I am the one that most commonly goes to the meeting.” A man in Phousang stated that he and his wife discuss who should go to the meeting. The result is that, except for when the head of the village specifically ask for women, he usually goes to the meeting. A man in Phousang explained that “I want to go to the meeting so I do not propose to take care of the children. But she wants to participate, so last time we went together and brought the children”

The village meeting is usually held in the evening. The head of the village in Phousang explained why: “Since the farmers work in the field during the day, the largest number of farmers that can participate in the meeting is obtained when the meeting is held in the evening. By holding the meeting in the evening, the time for the meeting is not limited since there are no duties that have to be done afterwards.”

However, most of the women do not agree that the evening is the best time to hold village meetings. A woman in Namo Nua stated that “I have to take care of the children in the evening, so usually my husband goes to the village meeting. If the meeting was held early in the morning I would have time to go”. All of the women that would like to participate in the village meeting more often, agreed that he best time for them would be early morning.

The women that are not interested in participating more often in the village meetings are the women with many small children. They stated that, concerning new crops and techniques, they only follow what their husbands decide and are not interested in participating in the decision making.

**Language barrier**

According to the interpreter, it was noticeable that fewer women than men speak other languages than the language of their ethnic group. The difference between men’s and women’s knowledge of Lao was clearly noticeable when talking to Lao Sung farmers, but not when talking to Lao Loum farmers. Therefore, Lao Sung women’s access to information from sources that do not use their minority language is more limited than for men.

The language barrier of women was also confirmed by an employee at DAFO, to whom farmers often go to ask question concerning the crops. “The men usually come individually to ask me something, whereas the women often come together in a small group because they are shy. Since the woman often have difficulties with the Lao language it is sometimes difficult to understand each other, but by using gestures and talking around the subject, we usually manage to understand each other.”

A woman in Mixay said that she has never talked to a trader. She clarified by explaining that her neighbours say that the traders speak Lao and since she does not believe she can speak Lao, she never talks to anybody that does not speak Hmong. However, the interpreter translating between Lao and English believed that her Lao is fully understandable. Therefore, difficulties with speaking another language than the mother
tongue may be more related to shyness or lack of self confidence than to the actual knowledge of another language.

The shyness of some women was clearly visible during the group discussion in Phousang. When smiled at, one woman put her jacket over her head and only occasionally peeped at us during the discussion.

5.9 Wealth and information

Poor farmers seem to be less exposed to new crops and techniques than wealthy farmers. This is due to the fact that a larger number of poor farmers than wealthy farmers stated that, since they usually work at the field most of the time, they do not have time to go to other villages or visit relatives outside the village. A larger number of poor farmers than wealthy farmers also stated that they seldom or never go to the market. A larger number of poor farmers than wealthy farmers also mentioned the constraints for use information. Poor farmers more seldom than wealthy farmers participate in on-farm experiments.

A poor farmer in Namo Nua, belonging to wealth category 4, said that he receives all information on new crops and techniques from his father-in-law and his uncle. He also receives information at the village meeting. Since he works for his father-in-law everyday, he has no time to look for information elsewhere. He seldom goes to a neighbour village or visits relatives. He heard about the on-farm experiments from his uncle, who participated in the frog experiment, but does not participate himself. He has no access to TV or radio.

A farmer in Phousang said that he is interested in several crops such as the two-season corn and fruit trees, but he lacks technical knowledge, land and money. A farmer in Phousang mentioned that he must learn new techniques and is interested in participation, but cannot because of lack of labour.

A wealthy farmer in Namo Nua stated that she often goes to the market, talks to other farmers in the same villages or other villages. She is also active in on-farm experiments and both she and her husband participated in the demonstration. A wealthy farmer in Mixay says that he often visits relatives in other provinces.

A wealthy farmer in Ponxay stated that it is more difficult for poor farmers than wealthy farmers to find information. He said that he was very poor himself when he was younger and therefore he knows that it is more difficult for poor farmers than wealthy farmers to find information. Talking from his own experience, this is not only due to lack of time for poor farmers, but also because of a shyness of wealthier farmers. He himself said that he has no problems finding new crops, for example he often has the opportunity to see different fields.

5.10 Need of information

The farmers gave several examples of information that they need and they lack mostly technical information. Several actors involved in diffusing information to farmers, as well as the majority of farmers themselves stated this. The interviews with the traders revealed
that also they sometimes lack technical information. Their lack of information is transferred to the farmers.

A farmer in Phousang would like to have more information concerning the harvesting technique of NTFP. He said that DAFO told the farmers in the village that they needed to change their harvesting technique of NTFPs. Therefore he also expected DAFO to provide the farmers with more suitable techniques of harvesting.

Several farmers in Mixay would like to know if the soil in their area is suitable for growing rubber tree. Although their relatives support them with information and sometimes practical help, they are interested in technical support also from DAFO.

Several farmers in Phousang were very interested in Black Ginger, which they had seen in the Mixay. The farmers had asked both farmers in Mixay and DAFO for seed, but none of them had any seed to give or sell to the farmers. When the interviews were carried out, they did not know where to look for seed.

A farmer in Phousang mentioned that she would like to learn new techniques that would increase the income, for upland rice. The woman discussion group Phusang wants to improve their land use, i.e. learn how to use the land all seasons. A farmer in Phousang mentioned that she needs to learn more about new agriculture products, but not what.
6 Conclusions

The conclusions are presented as answers to the research questions asked in the introduction.

What are the different actors who provide new agriculture and forestry information to farmers and how do farmers relate to them?

The farmers’ sources of information are:

- DAFO provides the farmers with both technical information, that is new harvesting and cultivation techniques as well as general information concerning land use, government policies and possibly occasionally about the market opportunities for certain products. Village meetings, trainings and demonstrations as well as study tours, cross visits and farmer field days constitute commonly used media.

  Although all farmers do not have access to the information that DAFO provides to the farmers, especially the technical information obtained through participation in on-farm experiment, DAFO seem to be appreciated mainly for their important amount of technical knowledge.

- GAA has, through a small scale training and demonstration activity, provided some of the farmers with a new cultivation technique.

- Traders provide the farmers with information concerning access to the market, price of the products and also frequently information on how and when to harvest or cultivate in order to obtain the quality demanded on the market. They also provide the farmers with information on fertilizers/pesticide.

  The traders introduced the farmers to the possibility to sell products in the market and have knowledge about what product and quality is demanded at the market. Therefore farmers value them as sources of information.

- Members of the family are frequently used sources of information. Parents traditionally provide their children with basic information, whereas also other members of the family constitute sources of information throughout the life of the farmer.

  The strong position of the farmers as sources of information is related to the proximity to the farmer. Since they often live close to the farmer, relatives often constitute the sources of information most easily contacted.
Neighbours in the same village as well as other villages also share all types of information with other farmers. They are often solicited by the farmer due their proximity.

**How do farmers obtain and use this information?**

*Media used to diffuse information to farmers*

Most information is diffused through oral communication channels.

- Trainings and demonstrations are the preferred media when obtaining information related to practical tasks because it facilitates the understanding. Time to participate is mentioned as a weakness of the media.

- Study tours, cross visits and farmers field days are valuable for receiving new ideas of crops and techniques and to compare techniques. The limited number of participants constitutes a weakness of the media.

- The village meeting constitutes the most common media for diffusing information to a large group of farmers. An advantage is that many farmers have the occasion to receive information. A disadvantage is that when no means of aid or not suitable means of aid is combined with the oral presentation, the information does not arise an interest and is difficult to remember.

- VCD is a popular media that creates interest for information and clearly illustrates practical task. However, it does not allow asking questions and thereby clarify certain aspects of the information.

- Radio is not widely known among all farmers. It is difficult to remember information when only listening. However, it was mentioned as an appreciated media for diffusing information in form of a case study of successful farmers.

Also written channels are used to diffuse information, but in a small extent.

- The advantage of books, pamphlets and posters is that one can review the information several times and decide when to obtain the information. However, it is difficult to find and the majority of the farmers believe that it is difficult to read.

*Reasons for obtaining information*

The farmers most commonly obtain information by seeing crops at a field or in the market and ask the owner of the land or the trader for seed and cultivation or harvesting technique. Information is also received as a consequence of another person’s – such as a relative’s, neighbours or a researcher’s - initiative to introduce a new crop or technique to them.
Experimenting with and comparison of information
The farmers seem to experiment with information. Techniques specific for one type of crops are applied also to other crops. Techniques are learned with the purpose of applying them to other crops then the ones initially regarded.

When receiving information about the same product from different sources, farmers often compare the different techniques in order to find out which technique give the best result. The comparison is mainly done by looking and testing, but also by asking. The preference for looking and testing indicates that farmers are visual and concrete.

Transfer of information between farmers
In case the information leads to a successful activity, the farmers seem to willingly share their knowledge and experience with other farmers. The transfer of information between farmers seems to mainly take place in the field when the information concerns a practical task. Information is also transferred by discussing in the village or on the way to the field, forest or market.

The farmers seem to prefer learning by doing when learning a practical task. This implies that the farmer most commonly prefer to demonstrate a new technique to another farmer rather than to tell.

What are the drivers and obstacles for obtaining and using information?
Drivers for obtaining and using information
A possible direct increase of income as well as reduced labour or improved land use that indirectly may generate an increase of income seems to be what mainly motivates the farmer to obtain and use information. The expectations on the information is related to the present situation of the farmer him- or herself or the children’s future situation.

Technical information, that is new harvesting and cultivation techniques, is the most demanded information. However, most of the farmers seem interested also in general information related to agriculture. Current need of information is improved harvesting techniques for NTFPs, especially Black Ginger, general and technical information related to rubber tree cultivation as well as improved techniques for upland rice cultivation.

Obstacles for obtaining information
A limited access to certain information can be distinguished for women and poor. For many women, the time of the village meeting and the language of the information constitute two obstacles for obtaining information. Poor farmers seem to be less exposed to new crops and techniques than wealthy farmers. Their limited opportunities to go to the market imply few occasions to discover and ask owners and traders about new crops in the market or new crops and techniques on the fields on the way to the market. The noticeable shyness of some female farmers and the possibly existing shyness of some poor farmers also constitute an obstacle for obtaining information in that the shyness may distract the farmer when receiving information or obstruct the farmer from asking for information.
**Obstacles for using information**

Having received information, the main constraints for farmers to use information, that is to act in the way that one desires as a consequence of receiving information, is lack of land, labour and money. Poor farmers have fewer resources, therefore they more commonly than wealthy farmers are subjects to these constraints. The constraints result in limited possibilities to participate in on-farm experiments and using information received from farmers that already participate in experiments.

**How do traders obtain and communicate new agriculture and forestry information to farmers?**

*Trader company to trader*

The traders receive the majority of the information related to the products they by from the farmers from the trader companies to whom they sell. The information includes expected price as well as recommended harvesting or cultivation technique for the product in question. Occasionally a product of good quality is demonstrated to the trader. The information from the trader companies is sometimes complemented by asking a person with previous experience of cultivation or harvesting techniques of similar products or by experimenting together with the farmers.

*Trader to farmer*

The information to the farmers is orally given directly to the individual farmers in a village, at a village meeting or in the market.

The traders’ statements that they cannot always provide the farmers with accurate information on how to obtain the quality demanded on the market shows that there is a need for information on cultivation and harvesting techniques related to the products demanded at the market.
7 Discussion

7.1 General discussion

In this section, some aspects of the study that might have influenced its outcome are discussed.

7.1.1 Target villages of the LSUA FRP

Constituting three of the five target villages of LSUA FRP in the Namo District, some aspects of the access to and communication of agriculture and forestry information for farmers in these villages certainly differ from those of farmers living in other villages in Namo District.

The DAFO staffs carry out activities with farmers also in other villages in order to, for example, introduce new cultivation techniques. However, in the target villages of LSUA FRP on-farm experiments are carried out. It implies that these villages are more frequented than other villages in the district by DAFO staff that support the experiments as well as other persons introducing the experiments and carrying out preparatory and evaluation activities. Consequently, the amount of information provided to the farmers by DAFO is probably larger in the target villages than in other villages in the district.

7.1.2 Identity and number of researchers

As mentioned in the method section, there were, apart from the interviewee and sometimes family and neighbours, several persons present during the interview. We represent different professional categories such as students, researchers and farmers. I and the interpreter both represent governmental institutions. At the same time we are women. I am also a student, younger than most of the interviewees and look very different. According his or her knowledge, opinions and attitudes, the interviewee determines which aspect of our identity that dominates in his or her view of us. What we represent in the eyes of the individual interviewee most probably has affected the outcome of the study.

All of the Lao persons present during the interviews, apart from the local people, belong to the Lao Loum group. The opinion among some of the minority groups that the government primarily favours the majority group Lao Loum might have influenced the answers of some of the interviewees and their willingness to cooperate. Previous actions of the state, such as the collectivisation and later the privatisation of land, might have influenced some farmers’ opinion of the government. Since we represent the government, such opinions may have been transferred on us and therefore affected the farmers’ answers.

The factors mentioned above may therefore constitute psychological obstacles for effective communication in that they determine how the questions are interpreted by the respondents and also influence the answers. It is also possible that filter and perception
obstacles played an important role in that some answers might have been manipulated to fit the expected opinions of the interviewer.

The large number of persons present during the interviews increased the influence of mechanical obstacles. Several persons talking simultaneously and children that were crying made apprehension of questions and answers more difficult. The pronunciation of the some interviewees also constituted mechanical obstacles.

7.1.3 Selection of the interviewees

Method of selection
According to the criteria of selection, I chose the interviewees by telling the head of the village which farmers I wished to meet the following day. The interviewees did not choose to participate; they were instructed to participate by the head of the village. Did that affect their interest in the interview and their willingness to cooperate? It is likely that being told what to do may have a negative influence on some farmers’ attitude towards the interview and thereby also affect the sharing of information. However, it is possible that other farmers perceive the instruction in a positive way; to them it may imply that they have been selected for a reason and therefore they are considered important.

I did not feel comfortable with the thought of maybe forcing some farmers to participate in the interviews when they might have had other things to do. Therefore I emphasised the fact that I desired to meet these farmers, but they should not feel forced to participate. However, I would appreciate in advance being told if they could not or did not want to participate so that I could ask another farmer. Since I myself did not have the possibility to ask the farmers in advance whether they would like to participate and some farmers did not show up, I do not know in what way the farmers were told about the interviews and can therefore not judge if this may have affected the outcome of the study.

Representation of categories
As mentioned in the methodology chapter, the in advance prepared selection of interviewees had to be adapted because an interviewee did not show up at all or because a partner or a child replaced the selected interviewee.

It was planned to interview an equal number of men and women representing all wealth categories from each of the three ethnic groups. In total the number of men and women are as equal as possible and all wealth categories and ethnicities are represented. However, divided into ethnic groups, the number of men and women and their respective wealth is not exactly equally spread out. Due to discussion groups in two villages, 11 Hmong farmers were interviewed, but only 8 Tai Dam and Phousang farmers. Looking at the interviewees from a gender and ethnicity aspect, the number of Hmong and Phousang men and women interviewed are equal, but for Tai Dam farmers the number of female and male respondents are 5 respectively 3.
Since there, in this subject, seems to be no distinguishable difference related to the ethnicity of the farmers, these slight differences have probably not affected the result to a large extent.

7.1.4 Social situation of the interviewees

Certain circumstances related to the social situation of the interviewee might have influenced the answers.

As mentioned earlier the men and women in the Lao Loum group are rather equal whereas the situation for women in the Lao Sung groups is more difficult. This was noticeable during the interviews with women. When interviewing women in the Lao Sung groups, especially in the Hmong ethnic group, the husbands were sometimes present. One reason might have been to support the wife from a language point of view. However, several times the husband sat closer to us than the wife did and answered the questions although it was specifically demanded that the wife should participate in the interview, not the husband. In order to receive the opinion of the woman, her view of the subject had to be demanded for after that her husband had answered. Most frequently, the woman agreed with the statement of her husband. Therefore, it is difficult to know whether the women's statement represent her personal opinion.

At least one of the interviewees was addicted to opium and affected by the drug during the interview.

7.1.5 Complimentary field study

A complementary field study was carried out for the purpose of obtaining more data and, therefore, increase the validity of the study. When observing and talking to people living in a culture and environment different from my own, I, despite preparations and studies of their culture, found it difficult to distinguish which aspects of their behaviour that are related to traditional practices or environmental conditions and which aspects that were primarily related to personality. The complementary field study constituted an occasion for me to visit a part of Laos characterised by conditions different to the ones in the area of the main field study and therefore contributed to increase my understanding for what behaviour is typical Lao, typical for a certain area or simply a trait of personality.

The complementary field study was carried out together with an interpreter that had not been previously involved in the study. There is a possibility that these interpreters chose to summarise the answers of the interviewee in different ways or emphasise different parts of my questions or the respondent’s answers. When comparing the answers of the respondents from the two areas, the possible differences distinguished between the answers may just as well reflect translation differences of the interpreters. Therefore, it would not be possible to simply add answers from the complementary study to the answers obtained in the main study.

Since only farmers were interviewed in the main study, it was chosen to mainly interview traders in the complimentary study. Thereby the answers did not have to be compared, but would still contribute to the study. The few farmer interviews carried out in the
complimentary study mainly served to gain insight in differences between the lives of farmers in different areas. However, since the number of farmer interviews carried out in the complimentary field study is much lower than that of the main field study, it was judged that no conclusions related to possible differences or similarities between farmers from the two areas can be drawn.

### 7.2 Discussion of the results

#### 7.2.1 Women’s access to and possibility to use accurate information

As described in the Laos chapter, both male and female farmers are involved in agriculture and forestry activities. However, certain tasks are more commonly carried out by one of the genders. Consequently, both men and women would need equal access to agriculture and forestry information. However, the results of this study indicate that women’s access to information differs from men’s access. The differences commonly seem to be related to the fact that women, in addition to carrying out farming activities, also are managing the household and taking care of the children to a larger extent than men.

**Change the time of the village meeting**

A large amount of information disseminated at the village meeting concerns activities carried out by women as well as men. Some information, such as information related to harvesting techniques for NTFPs, is especially relevant for women since they are the ones most commonly collecting the NTFPs. Most village meetings are held at night because a large number of farmers can participate and, since no work has to be carried out after the meeting, there is no time limit for the meeting. However, most women state that they cannot participate in meetings held at night because they take care of children.

The women state that early morning would be a suitable time for meetings. Therefore, when the topic of the meeting is especially relevant for women, the time of the village meeting could be changed to early morning in order to facilitate for women to participate.

**Bring the women in direct contact with the source of information**

The farmers learn practical tasks by doing and several farmers state that it is difficult to transfer knowledge to another person before having practical experience themselves. Several men give examples of, since the wife is the one actually carrying out the activity, having to transfer information received in a training or a village meeting to their wives before having put it into practice themselves. Women stated that they do not always understand the men’s explanation and therefore, when the information is related to NTFPs, ask the traders about the accurate technique after having harvested the product.

The communication theory points to the fact that since oral information is not possible to recall, the receiver may easily forget or misinterpret complex instructions given orally. The linear communication model shows that each time a message is sent between two persons both the sender and the receiver attribute a meaning – possibly different meanings - to the message in the encoding respectively decoding phase. These two facts indicate that when complex information is orally transferred between more than two
persons, as in the example described above, the risk for misinterpretations of the information increases.

Several farmers mention that when DAFO staff demanded especially for women to participate in a village meeting or a demonstration, a larger number of women did participate. Therefore, asking specifically for women’s participation in meetings or demonstrations concerning activities mainly carried out by women would imply that the information is transferred only between a minimal number of persons. Consequently, the risk that information is misinterpreted would be minimized. Bringing the source of information and the end-receiver together also implies that the latter person can give feedback on the information and thereby, when necessary, obtain additional explanations immediately.

**Increase the amount of information in local language**

There was a clearly noticeable difference between the men’s and the women’s knowledge of Lao in the Lao Sung group. Since the teaching language in school is Lao, this difference might partly be related to the years of schooling. As earlier mentioned, the average years of schooling is lower for women than for men which might explain the gender related language difference. The reason why Lao Loum farmers in the study speak better Lao than the Lao Sung groups might be related to the only relatively recent construction of schools in Mixay and Phousang. Another explanation might be that, due to the location of the village, Lao Loum farmers have been exposed to the market for a longer time than Lao Sung farmers. It implies contacts with traders and people living outside the village who most probably speak other languages than their own.

Although most of the agriculture and forestry information is diffused in Lao, the local language is sometimes used. Increasing the amount of information given in local language could increase the access to information for women.

**Investigate how to increase the women’s power of decision making**

Some women mentioned that they have received information about a crop that probably would be a better alternative to cultivate than a crop cultivated at present. However, she works only in the fields of her parents-in-law and she could not propose the new crop to them.

As mentioned in the Laos chapter, steam families - where the parents live with one of their sons and his wife - are common, especially in Lao Sung groups. The wife of the son, and also the son in many aspects, has very limited possibilities of taking decisions related to the management of the household and farming activities. Most commonly neither the son nor his wife tell or propose to the parents or parents-in-law what and how to cultivate. The traditional culture therefore explains why a woman, and to a certain extent also her husband, living with her parents-in-law cannot always put her knowledge into practice.

Investigating how to facilitate for women to give information to the persons taking decisions about activities carried out by the women and facilitate for them to apply their
knowledge without depending on decisions of the parents-in-law would probably increase their possibility to, due to receiving information, put their knowledge into practice.

Create a forum for or encourage the communication between women
Several women mentioned that they consider other women to be an important source of information. The women compare the quality of their respective products when going to the market or discuss crops and techniques on their way to the field. When both the husband and the wife were present during an interview, the husband always answered if the opinion of the wife was not especially demanded for. Several women, especially Lao Sung, also seemed shy and reluctant during the interviews where several unknown persons – both women and men – were present.

Activities including only women might favour the exchange of information between women. The participating women know each other which might minimise the shyness. Encouraging and facilitating for women to organize themselves into groups with the purpose of discussing and sharing information related to agriculture and forestry might favor their learning. Such a group would also be an excellent forum for women to identify opportunities and problem areas especially relevant to women and find solutions that are suitable to them. For this reason such a group would also serve as an important source of information for persons involved in decision making related to agriculture and forestry activities.

7.2.2 Poor farmers’ access to and possibility to use information
Increase their possibility to participate in organised activities
The farmers seem very interested in learning about new crops and techniques. Their statements also show that they often experiment with and compare information and that they willingly share knowledge with other farmers when they are asked about their activities. Their preferences of channels for receiving information show that they are visual and concrete. This indicates that on-farm experiments, study tours – where farmers can see and compare new techniques with already known techniques and farmer field days - where farmers are brought together to share their knowledge – are suitable channels to receive and give agriculture and forestry information. Therefore, this type of activities might well be developed for wealthy as well as for poor farmers.

Poor farmers’ occasions of being exposed to new crops and techniques outside the village are limited. The main obstacles for using information - lack of land, labour and money - are present especially for poor farmers. Their access to and use of information could be increased by, in a larger extent than at present, involving them in activities in the village organized by institutions outside the village or by the farmers themselves. These activities often demand access to several kinds of resources such as land, money and labour and therefore poor farmers are underrepresented in such activities. An extended involvement of poor farmers in this type of activities demands an investigation of how to eliminate or minimize the constraints for poor farmers and how to support such activities organised by farmers themselves. Since on-farm experiments based on activities already carried out by the farmer do not demand extra labour, increasing the amount of such experiments might for example be one solution.
7.2.3 Farmers’ interest for and adoption of information

**Complement oral information with other channels of information**

Several farmers state that it is difficult to remember information when only listening. According to the communication theory, complex instructions may generate problems for the receiver when given orally. However, oral channels allow for asking questions. The farmers mention that it is important to have the possibility to see, try and ask questions when learning practical tasks. The questions also serve as feedback to the sender and give an idea of whether the information was understood as intended. The farmers also stated that they became interested in a crop when seeing the seed in reality, not on a photo which illustrates the importance of using information channels that are adapted to the preferences of the receiver.

Oral presentations can be made more effective by complementing the oral information with other types of information channels. Bringing a real example of a seed or a product to an oral presentation will probably increase the interest for a new product. Introducing the subject by showing a VCD could increase the interest for the meeting and the subject.

Complimenting the oral presentation with information channels that can be reviewed afterwards will probably increase the accurate use of information. Books, pamphlets and posters are suitable reviewable complements to oral information for literate farmers and VCDs that can be viewed several times would probably be an appreciated complement by most farmers.

**Inform about economical advantages**

All farmers mentioned that a possible increase of income made them interested in a new product or technique. A higher price when selling the product implies a direct increase of income for the farmer. Reduced labour time implies that the farmer can produce and sell more with the same amount of labour and the result is an indirect increase of income. Improved land use probably generates a higher income in a long term perspective.

When telling each other about successful crops or techniques, farmers often emphasize that their income was increased and illustrate how the increase of income affected different aspects of the livelihood in a positive way. The farmers also state that they ask farmers having earned a lot of money for advice on their successful crops and techniques.

Informing farmers of the direct and indirect economical advantages of adopting a new crop or technique probably increases the interest for starting the activity and following the proposed technique. Giving examples from reality, such as case studies of farmers that successfully has adopted the crop or technique in question or similar crops or techniques, concretize and increases the trustworthiness of the information.

7.2.4 Cooperation with traders (Marketing system)

**Attain information about demand on the market from traders**

Farmers state that the main reason for following a technique proposed by a trader is that the trader knows how to obtain the quality demanded on the market. Thereby the farmer
obtains a higher price when selling the product. Based on the demand on the market, the traders decide what products to buy from the farmers and to what price.

Doing research on products that at present or in the future are expected to be demanded on the market may contribute to an improvement of the farmers’ livelihood in that they will have access to techniques that generate products of quality demanded on the market and thereby increase their income. As mentioned earlier, informing farmers about economical advantages probably increases the interest for the product and the cultivation or harvesting technique. For these reasons, current information from traders would be valuable when doing research and introducing new crops and techniques to the farmers.

**Provide traders with cultivation and harvesting techniques**

Both farmers and traders mention that traders give the farmers information about which cultivation and harvesting techniques to use in order to obtain the quality demanded at the market. The traders give several examples of products for which they did not know the suitable technique when informing the farmers. As a consequence, several farmers did not obtain good quality of their products and therefore received a lower price when selling to the trader.

Doing research on products that interest the traders and increase the traders’ access to information related to these products constitute an opportunity for researchers to develop and introduce farmers to cultivation and harvesting techniques that improve their livelihood not only through a sustainable use of land and forests but also through an increase of income.

**Encourage communication between farmers and traders**

As previously mentioned, farmers show large interest in receiving new agriculture and forestry information and they compare the information in several different ways. They also mention that it is easy to understand technical information received in demonstrations and study tours and that traders constitute an important source of information since they are updated on the demand on the market.

The traders’ statements show that they find it important to give the farmers accurate information about how to cultivate or harvest a product or what is advantageous to grow in their area and that it sometimes is difficult to explain a complicated technique to the farmers.

Encouraging the interaction between farmers and traders will probably favor both farmers, in that the farmers will maximize their income by choosing crops and using harvesting techniques according to the demand at the market, and traders, in that the traders will have a larger quantity of high quality products to sell. One way of encouraging effective communication between these two groups would be to facilitate for traders to organize demonstrations and study tours for the farmers.
7.3 Discussion of the methodology

This section starts with a discussion of different aspects of the translation that I, based on the experience gained by conducting interviews with farmers and trader, consider important to be aware of when working with an interpreter and conducting interviews in a language that is not the mother tongue. The methodology discussion ends with a reflection over some aspects of the data collection.

7.3.1 Translation

Translation process

When I noticed the difficulties we, I and the interviewee, had to understand each other, I tried to find ways to concretize my questions and comments even more than I did in the beginning of the process. However, since word-to-word translation was not applied, I am uncertain about how much of my efforts to change way of expressing that was noticeable for the interviewee.

When listening through the interviews I realise that I sometimes asked two questions at the same time without waiting for an answer. Although these questions sometimes interrogate two different aspects of the same issue, it was confusing for the interpreter who did not always receive clear instructions of what to translate.

However, there are occasions during all the interviews when I asked questions that, if asked directly to the interviewee, would not have been understood. This is due to the fact that after a number of interviews, the interpreter knew quite well what I was going to say at certain moments and to save time I formulated the question in order for her to know what I wanted to know, while she explained it in her own words to the interviewee. Also due to the experience gained after a number of interviews, the interpreter sometimes preceded my questions, using her own words and expressions.

Sometimes the formulation of the information or some parts of the content was purposely modified by the interpreter. The reason is that the interpreter was obliged to filter or adapt the information when necessary, that is for example when my question or the answer of the interviewee contained information that should not be transferred to the other person. The interpreter’s personal opinion about what was appropriate or not to translate most probably also influenced what information that was transferred between me and the interviewee. I was not informed about when or how information might have been modified and consequently I assume that the answers that I have received in this study do not always reflect reality.

Since a local translator was primarily needed in Mixay and Phousang, not in Namo Nua, the risk of misunderstandings due to several steps of translations was possibly higher in the Hmong and Phousang interviews than in interviews with Thai Dam farmers. This may have affected the result. However, the statements of the farmers were thoroughly discussed.
Construction of language
Misunderstandings were often due to differences between the languages. The differences created misunderstanding simply because the two persons involved in the dialogue were not aware of the differences.

An example related to gender illustrates such a difference between English and Lao. While English uses the words he or she (or it) to describe the subject in a phrase, Lao does not distinguish the gender of the subject. Since there is no difference in Lao, one person was sometimes in English referred to as both he and she during the interviews. Since I was not aware of this difference and therefore did not imagine that the two words could refer to the same person, I was very confused. Information that I thought was related to one certain person all of a sudden seemed to concern another person. Only after several days of interviews this was discovered.

Although it was usually not directly visible for me, similar type of misunderstandings occurred in the translation between Lao and the minority languages. In the following example a misunderstanding in the translation between Hmong and Lao was transferred also to English:

Hmong, in contrast to Lao and English, use one single word for describing several types of relatives such as father-in-law, mother-in-law or cousins. The Hmong word was translated to the word for cousin in Lao and thereafter translated to the English word cousin. Since English distinguish different types of relatives, I assumed that the interviewee was really talking about his or her cousin when in reality the word referred to different types of relatives.

Verbal and non-verbal interpretation
As mentioned earlier, non-verbal signs such as eye movements and changes of the facial expression constitute valuable information that should be taken into account when interpreting the respondent’s answer. Logically, the non-verbal information is added to the verbal information and summing it up probably gives a clearer picture of the meaning of the spoken sentence.

The non-verbal information given by the respondent is extremely difficult to interpret accurately for a person not speaking the same language. According to literature, one of the advantages of oral communication channels is that it allows for the person sending a message in a dynamic way and by emphasising certain parts and add non-verbal information to the message. However, this advantage is not noticeable for a person not speaking the same language as the sender of the message due to the fact that one cannot determine how the respondent acts in the exact moment of pronouncing a certain word or a certain phrase.

Also, when not belonging to the same culture as the interviewee, one might easily interpret the non-verbal signs incorrectly. The feeling one obtains of the respondent’s reaction at different moments is therefore only sometimes reliable. For this reason, the
interpretation’s information about for example possible underlying messages is highly valuable.

When meeting an angry Lao person for the first time I realised the importance of knowing the culture of the respondent in order to accurately interpret non-verbal signs. Since “losing face”, that is by facial expression or body gestures showing other people that one is angry, is regarded as shameful. The more irritated the person I meet became, the less it was visible. If I had not learned about the culture, I might not immediately have understood that this person’s smile in reality probably was to be interpreted as a sign of anger instead of joy.

Various definitions of a concept
As mentioned in the theory section, there are several types of obstacles for effective communication. The semantic obstacles are related to the language and imply that due to for example different experience, age and education, words and expressions have different meanings for different persons. Semantic obstacles were noticeable at several occasions in that I and the main interpreter used the same definition of a concept, whereas the local interpreter used another.

An example from an interview in Mixay illustrates the difference of meaning that one sometimes put in a concept. The old farmer said that he several times went to other villages and that the trips constitute an occasion to discover new activities and techniques. “Did he just go on his own or was it a study tour?” I asked. “It was a study tour.” I then assumed that he participated was a study tour organised by a community based organisation, LSUAFRP or DAFO. However, the farmers’ later statements implied that he could not have participated in such a study tour. After a discussion between me and the two interpreters it was discovered that two of us defined a study tour according to the previous explanation, whereas the third person called the trip a study tour simply because the farmer had learned a new technique by going on a trip.

In contrast to the main interpreter, the local interpreter did not, as mentioned in the method section, have the possibility to participate in any preparatory discussions. He or she was given a short introduction of the purpose of the study and its subject given by me or the interpreter. Participating in several interviews probably increased the local interpreter’s understanding for the structure of the interviews, aim of the different questions and feeling for what information is most important to translate. Due to participation in varying number of interviews, some local translators had more time to develop this understanding than others.

Preparatory discussions with the local translator as well as his or her participation in several interviews would probably decrease the risk of such misunderstandings.

Frustration
Frustration over not being able to explain my question in a clear way. Frustration over not understanding the answer given by the interviewee. Frustration over receiving an answer that is not even remotely related to my question. Frustration over depending on one
person for communicating with everyone for two weeks, both during and between interviews.

I am certain that the (main) interpreter if not often so at least occasionally must have had the same feeling of frustration during the two weeks of interviews. This is because she, like I, during several interviews asked questions and received answers through an interpreter (the local). She also had the challenge to translate the answers to me even though they were not always understandable.

The mood may constitute a psychological obstacle that hinders the receiver from correctly interpret a message. Therefore, the feeling of frustration may have affected the interpretation of the answers.

7.3.2 Data collection

Attain knowledge of the language, activities and culture of the interviewees

During the interviews, the attention of the interviewee alternated between the research team, household work and children. The interviews were also frequently interrupted by persons or activities demanding the attention of the interviewee.

During the interviews it was noticeable that, when the discussions between me and the interpreter were too long, the interviewee sometimes lost interest in the conversation. Having notions of words and phrases frequently used during the interviews allows the researcher to have an idea of the issue being discussed before it is translated and thereby makes the question asking more rapid. It also facilitates the understanding of the answers. Attaining knowledge about the culture increases the possibility to accurately interpret the answers of the interviewee.

Having extensive knowledge about the activities of the farmer would certainly facilitate the communication between the researcher, interpreter and the interviewee. Therefore, the researcher and interpreter carrying out this type of study would ideally have agriculture and forestry knowledge, communication theory, languages and culture of the interviewees. However, since a common language is indispensable for an exchange of information between the interviewee and the interviewer to take place, the language skills of the researcher and/or the interpreter are the most important areas of knowledge for this type of study.

Involve the local interpreter in preparatory discussions

Preparatory discussions with the interpreter about the subject and concepts of the study, structure of the questions and expected answers as well as about the culture, knowledge and experience of the interviewees was revealed to be extremely useful. Both parties gave and received information.

Between the interviews, the local interpreter provided us - the main interpreter and me – with important insights in the situation and environment of the interviewees. During the interviews it was also revealed that we put different meanings into certain words and concepts. When a second translation step is needed, involving the local interpreter in
preparatory discussions would increase the researchers’ understanding of the area of study and probably decrease the risk for misunderstandings.

**Allow time for several meetings with the interviewees**
Participating in an interview is an unusual situation for most people. Being asked questions by a previously unknown person and at the same time being surrounded by a group of at least five other persons might constitute an uncomfortable situation for anyone. In this case, there is an important difference between interviewer and interviewee in terms of knowledge, experience, language, behavior and looks. For this reason establishing a trusting relationship between the interviewer and the interviewee, and thereby allow for an open conversation, takes time – perhaps even more time than when the interviewer and the interviewee have more points in common.

Meeting the interviewees several times facilitates the establishment of such a relationship and implies several occasion for following up and discussing interesting issues. Fewer persons present during the interviews might also favour the creation of a relaxed climate.

**Chose an appropriate period of time and setting for the interviews**
In two of the villages, some of the selected farmers could not participate in the interviews. The reason mentioned was that a lot of work had to be carried out at the field due to harvesting time. Since participating in the interviews implied that the respondent could not work in the field that day, also farmers that did participate in the interview might have felt stressed and unconcentrated.

Carrying out the interviews during a season or period of time when the farmers have less work to do might increase some farmers’ engagement in the interview.

The interviews were held in the home of the interviewee. However it was noticeable that the respondents sometimes had difficulties remembering details concerning a certain crop. The interviews showed that real objects, such as real plants or seeds, arise more interest than photos or words.

Carrying out the interviews in the field - where the crops and techniques in question are visible - might evoke memories that are not remembered when only talking about them at home. It would also imply that the farmer can work at the same time as participating in the interview and therefore not feel stressed over loosing time of work.

**Carry out a pilot study**
In this study, the first days of interviews can be considered as a pilot study. Group interviews were tried and due to the outcome of these interviews it was, as explained in the method chapter, decided to only carry out individual interviews. Before coming to the conclusion that initiating the interview by asking about the activities of the interviewee was the most suitable way of finding out discussion topics that were of interest for the interviewee, I tried a few other ways such as proposing a crop that I - based on information obtained from the LSUAFRP reports - thought would be interesting.
The changes of the method were decided after discussion with the interpreter. Since she had previous experience of field studies and farmer interviews in other areas of Laos, she could provide me with valuable advice. However, carrying out a separate pilot study would have made it possible to discuss the outcome of the first days of interviews also with key informants with experience of field studies carried out in the Namo District before undertaking the real field study.

7.4 Reflections over the results

The following section brings up some aspects of the results that I find interesting to discuss, but that do not lead to any recommendations.

DAFO’s importance as source of information

In their statements, all farmers were positive towards DAFO staff and the on-farm experiments carried out within LSUAFRP. Both farmers that already have received information related to new techniques from DAFO and farmers that had not considered DAFO to be an important source of information. The farmers’ appreciation of this source probably lies in the quantity of information that DAFO staff, through for example activities organised by LSUAFRP, could provide the farmers with now and in the future. Mentioning the source as important, might imply an increase of information from this source.

However, the common opinion might not always represent the actual opinion of the farmer but be related to the identity of the researchers. In case the farmer believes that we, the researchers, consider that the organisations that we represent are the most important sources of information, there are some reasons why the farmer would chose to state this no matter what his or her own opinion is.

One reason is that stating that other sources of information are considered to be more valuable than DAFO, might, from the point of view of the farmers, make us feel uncomfortable. This is absolutely to be avoided. Another reason is due to the traditional way of relating to authorities; protests against or disagreements with higher instances are traditionally not appreciated.

Traders’ importance as source of information

It is logic that the information provided by traders to the farmers is important for products that are going to be sold at the market. The farmers mention traders as an important source of information especially for NTFPs. The traders bring up several examples of experimenting together with the farmers to find a harvesting technique that generates an NTFP of good quality. One trader also mentions that when he needs more knowledge about harvesting or cultivation techniques, he usually asks an experienced farmer when the information need is related to collection of NTFPs, whereas DAFO is most commonly solicited when the information need is related to cultivation of crop.

The on-farm experiments carried out in the villages so far mainly concerns new techniques for cultivation, raising of livestock and fisheries, but not harvesting techniques for NTFPs. In Ponxay District, where the interviewed traders are active, small scale
experiments are also carried out at the Sida-office. It is possible that the farmers are not fully aware of the knowledge of NTFPs that the staff of DAFO and LSUAFRP possesses. Therefore they chose to ask experienced farmers for advice on NTFP collection, but DAFO for advice related to cultivation.

**Ethnicity**
In contrast to what I initially thought, ethnicity does not seem to be decisive for the use of information and information sources. The differences that could be distinguished are probably more related to the location of the village than the ethnicity of the farmer living in the village. A larger number of Lao Loum farmers than Lao Sung farmers mentioned neighbours in the same or other villages as well as farmers of other ethnicities as sources of information. However, Namo Nua, where the Lao Loum farmers live, has, due to its location and the network of roads, been exposed to the market for a longer time. Thereby these farmers have met farmers outside their own village for a longer period of time, which could explain why they in a larger extent then Lao Sung mention sources of information that does not belong to their family or ethnicity.

There also seemed to be a difference between the Hmong and the Phousang tribes within the Lao sung category, in that Hmong farmers more frequently than Phousang farmers received information from farmers of the same ethnicity, even the same clan, living in other villages. In a way this behaviour is related to ethnicity, but it may just as well be due to the fact that there are extremely few, if any, other Phousang villages located near the village in the Namo District. Therefore Phousang farmers do not have the same possibility as Hmong farmers to visit farmers of the same ethnicity and family in other villages.
8 Recommendations

From this study we can conclude that the communication practices of farmers entail both obstacles and opportunities for effective communication of technical information. Based on the conclusions and the discussion of the results in the previous chapter, recommendations on how to take advantage of the opportunities and minimize the obstacles as well as suggestions for further studies are presented below. This chapter also includes suggestions for improvements of the methodology.

8.1 Effective communication

In order for information to be effectively transferred it needs to be internalized. From this study we can determine some factors that facilitate internalization.

Increase the women’s access to and possibility to use accurate information by:

- Changing the time of the village meeting.
- Bringing the women in direct contact with the source of information.
- Increasing the amount of information in local language.
- Investigating how to increase the women’s power of decision making.
- Create a forum for or encourage the communication between women.

Increase poor farmers’ access to and possibility to use information by:

- Increasing their possibility to participate in organised activities.

Increase the farmers’ interest for and adoption of information by:

- Complementing oral information with other channels of information.
- Informing about economical advantages.

Develop the cooperation with traders (a marketing system) by:

- Attaining information about demand on the market from traders.
- Providing traders with cultivation and harvesting techniques.
- Encourage communication between farmers and traders.

8.2 Successful methodology

Maximize the information exchange with the interviewees by:

- Attaining knowledge of the language, activities and culture of the interviewees.
- Involving the local interpreter in preparatory discussions.
- Allowing time for several meetings with the interviewees.
- Choosing an appropriate period of time and setting for the interviews.
- Carrying out a pilot study.
9 Personal reflections

This report describe the conducting and the results of the study as well as draw conclusions related to the method used and the results found. What it does not give an account for is my personal experience of conducting the study, experiences that I consider to be extremely valuable.

The study gave me the opportunity to see Laos from a point of view and meet its people in a way that I could not have done as a tourist. During my time in Laos I was invited to take part in both the professional and the everyday life of the Lao as well as participate in special activities such as ceremonies, festivals and parties. When conducting the interviews, I was given the opportunity to experience the everyday life of and communicate with farmers in remote and isolated areas of Laos. Meeting and talking to persons working with agriculture and forestry on both national, provincial and district level as well as the farmers themselves, both young and old, men and women, made me see issues from different points of view and therefore, I believe, gave me a realistic view of the situation in Laos.

Conducting this study was extremely valuable for me in that it taught me how I react and solve problems when I find myself in unexpected situations and unfamiliar environments. Unexpected events during the field trip obliged me to take initiatives and find solutions to problems that I had not experienced before. Due to new learning and results, changed prerequisites and misunderstandings I had to restructure the study several times. Leading the work of a team during the field trip made me realize the importance of being aware of culture differences when working together with people from other cultures.

Although conducting this study has been an interesting, exciting and amusing experience, it was also, from several points of view, a subversive experience. For this reason, if I was to do the same study over again, I would try to spend a little more time adjusting to the climate and culture as well as preparing the study before going into the field. Other possible modifications would be to stay longer in the field or divide the field study in two parts. I would also consider doing the study together with another student. The advantage of conducting the study on my own is, as previously mentioned, that I learned a lot about myself but also that when I, in the future, take on another challenge I can have confidence in myself. However, in many situations, especially during the field trip and when analyzing the interviews, it would have been valuable to have the possibility to discuss certain matters with somebody with the same background, culture and experience as I have.

I believe that by taking active, not only passive, part in activities that I am invited to and making an effort to learn about the language, culture and society, people become more open and friendly towards me in a shorter time and my experience of a certain country will be richer. This thought was confirmed also in Laos. I tasted extremely spicy food, I danced the Lao dance, I sang karaoke and I always tried to use the few words and phrases I had learned in Lao and the response I got in terms of smiles and face expressions, stories and invitations made my stay in Laos both amusing, instructive and memorable.
10 References

Books


**Brochures**


**Reports**


**Web sites**
FAO: *Participatory Approaches & Methods*.
www.fao.org